

The Mining Journal

AND COMMERCIAL GAZETTE.

No. 7.

LONDON, SATURDAY, OCTOBER 10, 1835.

Price 7d.

NATIONAL BRAZILIAN MINING ASSOCIATION.

MOCAUBAS and COCAES. Notice is hereby given, that the sum of £2 per Share, is required to be paid by the Shareholders in this Association, on or before the 10th day of October next, at the banking houses of Messrs. Jones, Lloyds, and Co., Lombard-street; Vere, Baple, Hanbury, and Co., Lombard-street; and Ransom and Co., Fenchurch-street. The Shares, together with a List of their Numbers, to be deposited with the said Bankers two clear days, in order that the same may be entered. By order of the Board, **BARCLAY MOUNTENEY, Secretary.**
N. B. M. A. Office, 25, Throgmorton-street, Sept. 24, 1835.

LONDON AND BRIGHTON RAILWAY.

THREE New Lines having been surveyed during the present year, and the Public and the inhabitants of Brighton being deeply interested, that the line best adapted should be selected with as little further loss of time as possible. The Directors of the London and Brighton Railway, incorporated by Act of Parliament during the Session just terminated, think it right to state for the information of the Public, that the result of the Surveys recently made of two additional lines (one by way of Oxted, and the other by the Southampton Railway) do not affect, but on the contrary, have confirmed in the strongest manner the Resolutions voted at the General Meeting of Shareholders in the Croydon Railway, on the 16th of July last, namely:—That the line of country surveyed by Mr. Gibbs, from London Bridge by the Greenwich and Croydon Railways, and thence by Dorking, Horsham, and Shoreham, is greatly superior to any other for the purpose of a Railway from London to Brighton. In order to afford the necessary means for the more perfect judgment, the Directors deem it best to lay before the Public the following table of the comparative levels, and of inclinations of rise and fall on the three lines. By this statement it will be observed, that the line of country surveyed by Mr. Gibbs is much superior to the other two, not only in the quantity of level, but in the more gradual inclination of the planes, excepting only the shorter portions, in which (according to the concurrent public testimony of the most able engineers) it has been decided to concentrate the rise, in order to obtain the greater proportion of levels.

Mr. Gibbs' Line.			Mr. Stephenson's Line.		
Miles.	Chains.	Level.	Miles.	Chains.	Level.
11	56	Level	15	51	1 in 1100
3	10	1 in 1002	54	11	530
6	18	1 in 1188	33	11	530
5	0	1 in 1028	37	0	1 in 330
3	36	1 in 114	2	11	1 in 100
2	31	1 in 107	2	11	1 in 100
5	3	1 in 2138			
2	31	1 in 111			
8	0	1 in 1289			

The Directors further give notice that the surveys and estimates of Mr. Gibbs' line, with several recent improvements not included in the above gradients, are prepared, and that plans and notices will be deposited in the usual manner, previously to an application to Parliament in the ensuing Session. The line surveyed by Mr. Gibbs, by way of the Greenwich and Croydon Railways, thence by Dorking, Horsham, and Shoreham. The first eleven miles of the road from London to Brighton, namely, from London Bridge to Croydon, are all ready provided for by the Royston Railway Act, which received the royal assent May last. The surveys of the lines are completed throughout, and the usual Parliamentary notices, plans and estimates prepared, for which all the expenses are already provided.

N.B.—A Prospectus is preparing, containing full particulars, in the mean time applications for Shares of £20 each, upon a Capital of £200,000, with a Deposit of £1 per Share, may be made as follows, viz.—To the Bankers, Messrs. Jones, Lloyds, and Co.; to the Solicitor, William Burchell, Esq., 24, Red Lion-square, Holborn, London. The Provisional Committee, consists of the following gentlemen: J. F. Maubert, Esq.; John Moxon, Esq.; Francis Ricardo, Esq. with power to add to their number, by letter, post paid upon the following terms—viz.: £1 per Share to be paid by each Subscriber upon the allotment of the Shares, which will be repaid without any deduction whatever, if the sum of £500,000 be not subscribed (with deposit of £1 per Share paid thereon) on or before the 30th of November next. The allotment will be made by them from the List of Subscribers, with reference to local interests, amount of subscription, or other requisite qualification. By order of the Provisional Committee,
12, Angel-court, Throgmorton-street. **R. S. YOUNG, Secretary.**

REDRUTH UNITED TIN AND COPPER MINING ASSOCIATION.

THE SCRIP SHAREHOLDERS are hereby reminded that, the Second Instalment of 10s. per Share, will become due on the 1st October next, according to a resolution of a General Meeting held on the 28th July last; and the same must be paid into the Bankers of the Association, Messrs. Spooner, Atwoods, and Co., Gracechurch-street. **W. MILL'S MIDWINTER, Sec.**
21, Lombard-street Chambers, Clement's-lane, Sept. 29th, 1835.

CARN GREY TIN MINING COMPANY.

THE Directors hereby give Notice that a Call of £1 per Share is made, and will become due the 1st of November next, the holders of Shares are, therefore, requested to pay the same to Messrs. Drewett and Fowler, Bankers, 60, Broad-street.
46, Lime-street, 30th September, 1835. **JOHN W. F. DALTON, Secretary.**

NORTHERN AND EASTERN RAILWAY FROM LONDON.

LONDON COMMITTEE.
Sir Jacob Astley, Bart., M.P.
John Angerstein, Esq., M.P.
Rowland Atkinson, Esq., M.P.
Rowland Gardiner Atkinson, Esq.
Sir Thomas B. Beevor, Bart.
John Bagshaw, Esq., M.P.
Sir W. J. H. B. Folkes, Bart., M.P.
Charles Johnson, Esq.
Francis Kemble, Esq.
Robert William Kennard, Esq.

YORK COMMITTEE.
The Right Hon. the LORD MAYOR, Chairman.
Thomas Backhouse, Esq.
Mr. George Baker.
Thomas Barstow, Esq.
Francis Cholmeley, Esq.
William S. Clarke, Esq.
George Clough, Esq.
William Cooper, Esq.
Mr. Robert Cooper.
The Hon. J. C. Dumas, M.P.
Charles Henneage Eley, Esq.
William H. Hearson, Esq.
William Hotham, Esq.
George Hudson, Esq.
George Jennings, Esq.
John Henry Lowther, Esq., M.P.

NORWICH COMMITTEE.
Timothy Steward, Esq.
Richard Cravenshaw, Esq.
Samuel Shadlow Deane, Esq.
John Cozens, Esq.
Horatio Solingbroke, Esq.
John Marshall, Esq., Sheriff.
Richard Shaw, Esq., Alderman.
David Hills, Esq.

TRUSTEES and TREASURERS.—Sir James Cockburn, Bart., John Masterman, Esq.
STANDING COUNSEL.—The Hon. James Stuart Wortley.
BANKERS.—Messrs. Masterman, Peters, and Co. Messrs. Sir James Esdaile & Co.
SOLICITORS.—Messrs. Vizard and Lemon, Lincoln's Inn-fields.
PARLIAMENTARY AGENTS.—Messrs. A. and R. Mundell.
ENGINEER.—James Walker, Esq., F.R.S., L. and E.

Office of the Company, No. 36, Lombard-street.
Application will be made to Parliament in the next Session, for an Act to enable the formation of this Railway. The country, from its level nature, is peculiarly favourable, and the expense will be proportionally small. The average inclination will be 1 in 528. It will open the most ready communication to the north and north-western parts of England as well as Scotland, and will form a grand trunk to receive auxiliary communications on all sides. The distance to York will not exceed the mail-coach road, and will be performed with ease in ten hours. The passengers travelling along this road greatly exceed those of any other road from London, whether posting or by stages. The immense supplies of animal and other food coming from the north and east to the metropolis, will be brought in a much improved condition, and at a greatly reduced expense, as will also the merchandise from Leeds and the manufacturing districts. The cost of this Railway will be under £2,000,000; the income, after deducting all expenses, will, on the most moderate calculation, exceed £400,000 per annum, paying 14 per cent. profit. The road will commence near Shoreditch Church, and proceed through Bishop's Stortford, Cambridge, Lincoln, and Selby, to York. At Selby it will join the line to Leeds, and at once open a communication with that most important district.

Applications for Shares of £100 each (if by letter post-paid) may be made to Messrs. Vizard and Lemon, Lincoln's Inn-fields; and to the Secretaries, at No. 36, Lombard-street, where also a more detailed and full Prospectus may be had. A deposit of £2 per Share will be required to be made to Messrs. Masterman and Co., or Messrs. Sir James Esdaile & Co., London; or at the Company's Bankers at York, Leeds, Doncaster, Lincoln, Peterborough, Cambridge, Hertford, Norwich, Yarmouth, Manchester, Liverpool, Edinburgh, and Glasgow.

CHARLES ROWCROFT, SECRETARY.
SEPTIMUS HODGES, SECRETARY.

ON Sale, SHARES in several of the best Mining Companies of Cornwall, that are now dividing Profits. Shares in both Life and Fire Insurance Companies, Iron Railways, Gas Companies, &c. &c.; likewise United States' Stocks, and Bank Shares, that are now paying a dividend of 4 per cent. Apply to **CHARLES MANN, Stock and Share Broker, Stock Exchange; and Tom's Coffee House, Cornhill.**

ON SALE, at the office of F. A. Helps, Stock and Share Broker, 9, Finch-lane, Cornhill, SHARES in the Croydon, Grand Junction, and Trent and Mersey Canals; in the London Dock Company; Brighton, Chartered, Imperial, Ratcliff, and United General Gas Companies; British Commercial, Globe, Hope, Life, and Protector Fire Insurance Companies; in the Commercial Road; Provincial National Bank; in the General Steam Navigation and Star Steam-packet Companies.

ALLIANCE GAS COMPANY.

THE Directors of the ALLIANCE GAS COMPANY, hereby give Notice that the obstacles thrown in the way of the arrangements for Lighting the City of Dublin being now removed, and the sanction of Government and the Local Authorities obtained, operations will be immediately commenced for carrying into effect the objects of the Company.
HENRY ENGLISH, Resident Manager.
37, New Broad Street, London, 29th Sept. 1835.

PENOBES GOLD MINING ASSOCIATION.

NOTICE is hereby Given, That a Half Yearly General Meeting of Proprietors will be held at the North and South American Coffee House, on MONDAY, the Second Day of November next, at Two o'clock precisely.
37, New Broad-street, London, Sept. 30, 1835. **GEORGE MORGAN, Sec.**

GREAT NORTHERN RAILWAY.—LONDON TO YORK, CAMBRIDGE, LINCOLN, SELBY, AND NORWICH.
Capital—£3,000,000, in Shares of £100 each.—Deposit £2 per Share.
Bankers—Messrs. Ladbroke, Kingscote, and Co.
Solicitors—Messrs. Bignold, Pully, and Mawe, London and Norwich.
Engineer—Joseph Gibbs, Esq.
Application for Shares to be addressed to the Secretary at the Office of the Company, 25, Bucklersbury, where Prospectuses with Maps may be obtained.
WM. RD. CROGGON, Secretary.

GREAT NORTHERN RAILWAY.

A T A MEETING of the COMMITTEE at NORWICH, held the 5th of October, 1835, at the Guildhall, in the City of Norwich, **CHARLES TURNER, Esq., Deputy Mayor, in the Chair.**
It was Resolved,
That the Committee is more than ever impressed with the advantage of a Railway communication between their City and London, and having considered the surveys of Mr. Gibbs, is of opinion that the Line proposed by him will be shorter, less costly to construct and work, and less likely to encounter opposition in Parliament than any other line yet proposed.
That this Committee will by every means in their power promote this object, and invite the united assistance of every interest connected with the County of Norfolk and the City of Norwich to forward the same.
(Signed) **CHARLES TURNER, Chairman.**

LONDON AND BLACKWALL RAILWAY AND STEAM NAVIGATION DEPOT COMPANY.

CAPITAL—£600,000, IN 12,000 SHARES OF £50 EACH.

DIRECTORS.
FREDERICK MANGLES, Esq.
JOHN NEMBIT, Esq.
EDWARD STEWART, Esq.
JOSHUA WILLIAMSON, Esq.
TREASURER.—HENRY KINGSCOTE, Esq.
BANKERS.—Messrs. LADBROKE and CO.
ENGINEER.—GEORGE STEPHENSON, Esq.
SOLICITORS.—Messrs. I. and S. PEARES and Co., and Mr. T. BROWN.

The principal objects of the undertaking are for conveying goods from the West and East India Docks, the conveyance of passengers to and from the Docks and Blackwall; the embarking and disembarking passengers to and from the various steam packets at Blackwall, and the landing of coal there, at all times of the tide with great facility.

Goods.—It has been ascertained, that the cost of carrying goods from the East and West India Docks, can be effected by railway for one half of the present charge, which will ensure the carriage of at least two-thirds, if not the whole of the articles imported into those docks.

PASSENGERS.—At present there are 4,300 persons daily conveyed by coaches and omnibuses to the West and East India Docks, and Blackwall, at the charge of sixpence each, in 40 minutes; by the railway, passengers will be conveyed in ten minutes. Previously to the opening of the Liverpool and Manchester Railway, the average number daily travelling on the road was 450, since then, the number has been increased more than threefold. It may, therefore, be inferred, that the number of passengers will be considerably increased on this line. An opening will be made for an immense traffic over this railway, as it will become the most advantageous and profitable medium of conveyance from that point of the river, which may be considered the natural and most convenient maritime inlet of the metropolis. The City Council and the House of Commons were during the last session, devising means for preventing accidents by steam vessels. This plan has been pronounced by the harbour masters and the owners of steam vessels, as affording a remedy, without the intervention of the City or the legislature, and without any compulsion. It is stated by the owners of steam vessels, that the passage through the Pool is attended by such delay and heavy loss, from damage inflicted and sustained by their vessels, as to amount, in many instances, to £200, or £300, a vessel in a season, and that they would readily adopt Blackwall as the termination of their voyage. One of the most eminent engineers has stated that no line of road in the kingdom offers such prospects of success as this. And when the enormous quantity of merchandise imported into the West and East India Docks,—the thousands of passengers that now travel the road daily,—the immense quantity of coal that would be shipped at Blackwall, and conveyed on the railroad for consumption in the vicinity of the termination of the railroad,—the number of passengers that would land at Blackwall, from the various steam packets,—and the fact that facilities of communication increase traffic to a treble, and in some cases, to a greater extent,—when these things are taken into consideration it will be apparent, even to the most sceptical, that few undertakings embrace more important advantages than the present. The number of passengers that go by water to Gravesend, Margate, and Ramsgate, is one thousand seven hundred and fifty thousand a year. By embarking at Blackwall, a saving in distance of four miles will be effected. The voyages performed an hour less each way, and the dangers on the river avoided. As regards Gravesend, one fourth of the voyage will be saved both ways, and the passage performed in an hour and a quarter. These great advantages will ensure the adoption of Blackwall for embarking and disembarking, in preference to London, and it may fairly be calculated, that two-thirds of the passengers, amounting to 1,166,666 would prefer landing there. Carriages constructed so as to travel on common roads, will convey passengers from Blackwall to the termination of the railway in ten minutes.

COAL.—In the year 1833, 9,010,000 tons of Sea Coals were brought to London; and it has been estimated that one-fourth of the coal imported is consumed in the eastern quarter of the metropolis; but, assuming that only one-eighth, or 250,000 tons would pass over the railway, at the charge of 1s. 6d. per ton, there would be a revenue on this article alone, of £18,750, per annum, and a saving to the consumers of 2s. per ton. The coal would be landed at a great saving of time and expense, and without the injury it now sustains in being turned over so many times.

ESTIMATED SOURCES OF PROFIT.		
West India Docks, conveyance of two-thirds of 250,000 tons of goods at 1s. 6d. per ton.	£13,416	0 0
East India Docks, conveyance of 45,000 tons, at 2s. per ton.	4,500	0 0
Passengers conveyed in carriages to the East and West India Docks, and Blackwall, (the present number being 4,300 daily) at 6d. each.	29,237	10 0
Passengers conveyed by Steam Packets to and from Gravesend, Margate, and Ramsgate, 1,750,000 a year. Two-thirds of whom, it is calculated, will embark and disembark at Blackwall, carriage at 6d. each.	30,166	10 0
Coal landed at Blackwall for the consumption of the east end of the Metropolis, 250,000 tons, at 1s. 6d. per ton.	18,750	0 0
Merchandise, Timber, Stone, &c., conveyed on the Railway.	16,000	0 0
	115,079	0 0
Deduct for Annual Repairs, Salaries, and Current Expenses.	35,000	0 0
Net Profit per Annum.	£80,079	0 0

The Capital Stock of the Company has been increased to £600,000, to be divided into 12,000 Shares of £50 each, in consequence of its having been determined to extend the line further into the City than was at first contemplated. A deposit of £2 per Share to be paid into the hands of the Bankers. Subscribers not to be answerable beyond the amount of their respective Shares, and it is contemplated that no further call will be required until the Act of Parliament is obtained. A Bill will be prayed for in the ensuing Session of Parliament, for making the London and Blackwall Rail Road; and, from the numerous and solid advantages to be derived by the public therefrom, no doubt is entertained, but that an Act of Parliament will be obtained.

Applications for Shares (post paid) to be made to the Bankers, Messrs. Ladbroke, Kingscote, & Co., Bank Buildings; at the Railway Offices, 16, Bishopsgate-street Within; or to the Solicitors, Messrs. I. & S. PEARES, Phillips, & Bolger, St. Swithin's-lane, and Mr. Thomas Brown, 13, Rood-lane, Fenchurch-street.

Railway Offices, 16, Bishopsgate-st. Within. **C. H. WINFIELD, Acting Secretary.**

IMPERIAL BRAZILIAN MINING ASSOCIATION.—Winchester House, Broad-street, Oct. 7, 1835.—Notice is hereby given, that the BOOKS for the TRANSFER of SHARES in this Association will CLOSE on Thursday, the 15th inst., and RE-OPEN on the day next after that of the general meeting in November, of which due notice will be given. **L. J. SIMOENS, Secretary.**

NOTICE is hereby given, that APPLICATION is intended to be made to PARLIAMENT, in the next session, for an ACT for MAKING and MAINTAINING a RAILWAY or RAILWAYS, with proper works and conveniences connected therewith, for the passage of waggons, carts, and other carriages, properly constructed, to be drawn by locomotive engines or other power, and to communicate with the London and Greenwich Railway near to where it crosses a certain highway or street called But-lane, otherwise High-street, in the parish of St. Paul, Deptford, in the county of Kent, and to extend to or pass through or into the parish of St. Nicholas, Deptford, in the county aforesaid, and to terminate at the southern bank or shore of the river Thames, at or near a certain intended pier, wharf, or terrace, to be called "the Deptford Pier," in the said parish of St. Nicholas, Deptford, in the said county of Kent.—Dated this 14th day of September, 1835.
ARTHUR DAVIS, Deptford.

THE ROYAL COPPER MINES OF COBRE IN THE ISLAND OF CUBA.

THE Proprietors are requested to take notice, that the Second Instalment of £3. on each Share becomes due on SATURDAY, the 10th instant, and must be paid into the Banking-house of Sir James Esdaile and Co., Lombard-street, within thirty days from that date. The Scrip Notes must be produced at the time of payment.
By order of the Directors,
BAKENDALE, TATHAM, UPTON, and JOHNSON,
7, Great Winchester-street, Oct. 5, 1835.

GREAT NORTHERN RAILWAY.—London to York, Cambridge, Lincoln, Selby, and Norwich.
Capital—£3,000,000, in Shares of £100 each.—Deposit £2 per Share.

LONDON PROVISIONAL COMMITTEE.
Sir Peter Laurie, Alderman
Sir William De Bather, Bart.
Robert J. Bunyon, Esq.
John Lewis Kyte, Esq.
Adam Gordon, Esq.
Lieut. Colonel Leith Hay, M.P.
John Humphrey, Esq., M.P.
Henry Kingscote, Esq.

YORK COMMITTEE.
The Right Hon. Thomas Wood Wilson, Lord Mayor
John Henry Lowther, Esq., M.P.
The Hon. John Charles Dundas, M.P.
Charles Eley, Esq., Recorder of York
Eustachius Strickland, Esq.
Francis Cholmeley, Esq.
Thomas Price, Esq.
Wm. Hotham, Esq., Alderman
Wm. H. Hearson, Esq., Alderman
Wm. Oldfield, Esq., Alderman
William Cooper, Esq., Alderman
John Simpson, Esq., Alderman
Robert Swann, Esq.
Thomas Barstow, Esq.

NORWICH COMMITTEE.
Henry Willet, Esq.
John Wright, Esq.
Henry Chamberlain, Esq.
Timothy Steward, Esq.
H. Martineau, Esq.
J. Athow, Esq.
Samuel S. Deane, Esq.
J. G. Johnson, Esq.

BANKERS.—Messrs. Ladbroke, Kingscote, and Co., Bank-buildings.
SOLICITORS.—Messrs. Bignold, Pully, and Mawe, London and Norwich.
Engineer—Joseph Gibbs, Esq.

The Railway will commence at Watercress, and proceed near Dunmow to Cambridge, from whence, in an undulating line, it will extend to Lincoln, passing through Stamford and Selby to York.

The Railway will pass near Huntingdon, Ely, Peterborough, Wisbeach, Market Deeping, Grantham, Newark, Gainsborough, Doncaster, Thorn, Snaith, and Howden. By the junction with the Leeds and Selby railway, a perfect communication will be made with Leeds, Bradford, Halifax, Huddersfield, and the other great manufacturing towns in that district.

Increased facilities will thus be afforded to the following branches of commerce: The cotton and lace manufactures of the counties of Nottingham and Derby. The stocking manufacture of Leicester. The cutlery and iron works of Sheffield.

The carpet, blanket, and woollen manufactures of Dewsbury, Leeds, and Huddersfield.—The linen manufactures of Knaresborough and Barnsley. The silk and woollen manufactures of Norwich. The collieries of the north.

All the staple commodities of Scotland. And agricultural produce throughout the whole line. The undertaking claims especial attention and support from the additional fact, that it will not interfere with existing interests, but, on the contrary, materially benefit the canals and the several isolated railways already formed (or in course of formation), by ultimately becoming the grand duct of these several commercial veins of the kingdom, uniting the metropolis of England with Edinburgh and Glasgow.

An ample return for the outlay may confidently be expected, the estimates being founded on the present actual traffic, without taking into account the great increase that must necessarily accrue.

The estimated cost of the line from London to York, founded on accurate surveys, will be—
And the line to Norwich - - - - - £3,254,420

Another very important consideration is, the nature of the country, the line between London and Norwich, and Dunmow and Akrigg (90 miles beyond York), being extremely favourable, presenting fewer obstacles to the formation of the line than has been proposed for the construction of a railway.

Application for Prospectuses, with Maps, and for Shares, to be made to the Secretary, W. R. CROGGON, Esq., at the Offices, 25, Bucklersbury.

BOLANOS MINING COMPANY.—FIFTH DIVIDEND.

SIR.—I am desired by the Court of Directors to acquaint you, that they have this day declared a Dividend of £5 per share, to become payable at the Office of the Company on and after WEDNESDAY, the 30th September instant, to the Proprietors of Shares who may appear to be such in the books of the Company on Monday, the 29th instant. The Dividend will be payable daily between the hours of Eleven and Three, until the 31st October next, from that period it will be payable on Mondays only, between the same hours.
I am further desired to acquaint you, that the Books for Transfer will be closed from Saturday the 26th to Wednesday the 30th instant; and that all transfers which shall not have been completed by the return of the transfer deed to the Office of the Company on or before Saturday the 30th instant, will be considered, as far as respects the right to the Dividend, as not having taken place, and the person in whose name the shares shall then stand in the books of the Company, will be entitled to claim the payment thereof.—I am, Sir, your most obedient servant,
GEORGE FORBETT, Secretary.

N.B. Proprietors who may be unable to attend personally, in order to receive their Dividends, are requested to fill up the Form supplied from the Office.

HULL and SELBY RAILWAY.—Capital £270,000. Shares £50 each. Deposit £1 per Share.—In 1830, the persons principally interested in the trade from Leeds and the eastern parts of Yorkshire to Hull, entered into a subscription for a railway from Leeds to Selby, and thence to Hull, now one of the finest ports in the kingdom. The portion from Leeds to Selby (36 miles) was opened in September, 1834, and is acknowledged to be one of the best works of the kind in the country. The number of passengers in the first year was more than double the number estimated, and is regularly increasing. It is also the quantity of goods and minerals; and the shares, which were at a discount twelve months ago, are now in great demand at a premium.

It is now designed to extend the line from Selby to Hull, for which the necessary surveys and estimates have been made by Messrs. Walker and Burgess, civil engineers, Great George-street, Westminster. The length is 30 miles, almost in a straight line, and being nearly level, without any considerable cuttings or embankments. The estimate is comparatively low, viz. £375,000. Upwards of half the number of shares have been already taken, principally in Hull. Mr. Marshall, Mr. Goff, and several other influential gentlemen of Leeds, are also large subscribers.

The estimate of revenue, which has been made on the most moderate grounds, shows a certain clear profit exceeding £8. per cent.; and as a railway to Manchester is contemplated, and will probably be made ere long, thereby the communication between Hull and Liverpool. By this extension of conveyance, the traffic and profits may be reasonably expected to be greatly increased.

The plan, section, report, and prospectus, may be seen, and any remaining shares made, at the bank of Messrs. Smith, Payne, and Smith, South Sea Chambers; or at the Hull and Selby Railway Office, Bishopsgate-street, where Mr. Locking, of Hull, the Secretary of the Company, may be referred to until the 10th of October, to C. H. WINFIELD, Solicitor, Hull; or to Messrs. Hopwood and Foster, 27, Chancery-lane.

GATESHEAD, SOUTH SHIELDS, and MONKWEARMOUTH RAILWAY COMPANY. Capital £150,000, in 1,500 shares of £100 each.

DIRECTORS IN LONDON.
 THOMAS BARRETT, Esq.,
 EDWARD BLOUNT, Esq.,
 JOSEPH GROUT, Esq.,
 JOHN F. HARRISON, Esq.

DIRECTORS IN THE NORTH.
 (To be hereafter named.)

TREASURER.
 WILLIAM CHAPMAN, Esq.

BANKERS IN LONDON.
 Messrs. VERR, SAMPSON, BARRETT, and CO.

SOLICITORS.
 J. H. WATSON, Esq., London. Messrs. R. & J. R. BOWLEY, South Shields.

ENGINEERS.
 THOMAS E. HARRISON, Esq.

The above Company has been formed to connect the towns of Gateshead, South Shields, and Monkwearmouth, and for establishing therewith a complete Junction with the Haydon, Gateshead, and Hellsburn Railway, the Stanhope and Tyne Railroad, and the Durham Junction Railway.

Prospectus, containing estimates of the cost of the formation of the Railway, of the annual expenditure, and of the expected revenue, may be had at the Offices of the Company, 26, New Broad-street, London; Blue Anchor, Chare, Newcastle; and Long-row, South Shields, on and after Tuesday, the 6th October, 1855.

COMMERCIAL ROAD RAILWAY to the EAST and WEST INDIA DOCKS, and the RIVER THAMES at BLACKWALL. The following Gentlemen, being present, were appointed, at a General Meeting held at the Mansion-house, on Wednesday, the 28th September, 1855, a provisional committee for carrying the above measure into effect. Sir Peter LAURIE in the chair.

The Right Hon. the Lord Mayor.

Sir Peter LAURIE, Knt. Alderman.
 JOHN PIRIE, Esq., Alderman.
 HENRY NELSON, Esq.
 JOHN STOCK, Esq.

With the Chairman and Deputy Chairman of the East and West India Docks Companies, who were to be invited to join the committee. The provisional committee so appointed having been duly assembled this day, authorized Sir John Rennie and James Walker, Esq., to consider the best means of carrying the measure into effect, in connection with the Commercial Road, who are to report thereon to a future meeting.

Commercial-road Office, No. 3, Crosby-square,
 1st October, 1855.

NEWCASTLE-ON-TYNE and CARLISLE RAILWAY.

Established by Act of Parliament, 1829.

DIRECTORS, 1855-56.

MATTHEW PLUMMER, Esq., Chairman.
 The Right Hon. the Earl of DURHAM.
 Lord WILLIAM POWLETT.
 The Mayor of NEWCASTLE.
 T. W. BRACMONT, Esq., M.P.
 MATTHEW HELL, Esq., M.P.
 T. R. BATSON, Esq., Newcastle.
 JOHN BRANDELL, Esq., Gosforth.
 J. GRAHAM CLARKE, Esq., Newcastle.
 Lieut. Col. COLVILL, Blenkinsopp Castle.
 JOSEPH CHAWWALL, Esq., Newcastle.
 JOHN DIXON, Esq., Carlisle.
 PETER DIXON, Esq., ditto.
 THOMAS FENWICK, Esq., Newcastle.

Treasurer—ROBERT BOYD, Esq.

Clerk of the Company—JOHN ADAMSON, Esq., Newcastle.

Office, No. 16, Newgate-street, Newcastle-on-Tyne.

STATE OF THE UNDERTAKING, August, 1855.—This Railway, which connects the German Ocean with the Irish Channel, is now opened for traffic for the space of Seventeen Miles, viz. from Haydon, on the navigable River Tyne, distant four miles from Newcastle-on-Tyne, to Hexham. It is expected to be opened from Hexham to Haydon Bridge, a further distance of seven miles, and from Blenkinsopp to Carlisle a further distance of twenty miles, in the month of March next; forty-four miles of the line will then be opened. The whole line from Newcastle-on-Tyne to the Carlisle Canal Basin, a distance of sixty-two miles, is to be completed in about one year more. The income on the portion of line now open (17 miles) has been as follows, viz.:

From Passengers.		Goods and Parcels.	
In May.....	£45 11 4 per week	£27 15 0 per week	
June.....	143 12 6 ditto	53 15 8 ditto	
July.....	169 11 0 ditto	53 10 1 ditto	
August (two weeks).....	220 3 3 ditto	50 18 4 ditto	
And from LEAD during the above period.....	£65 18 8 per week		

Considering that the traffic of these seventeen miles is conducted without the benefit of communication with the other parts of the line not yet opened—that Coals, Culin, Lime, Iron Stone, and Farm Produce, which were the main sources of revenue originally calculated on, have not yet been brought upon the line—and, in particular, that it is under the extreme disadvantage of the communication between Haydon and Newcastle not yet being completed—the amount of revenue which it yields has exceeded every calculation that could have been formed of it. The current expenditure applicable to this portion of the line, including an allowance for the deterioration of engines and carriages, is about £95 per week. It would appear, therefore, that taking the actual weekly income—

From passengers.....	£220 3 3
Goods and parcels.....	56 18 4
Lead.....	65 18 8
	£343 0 3

There is an annual income of.....	£17,836 0 0
Deduct expenditure £95 per week.....	4,940 0 0

Leaving a nett revenue of.....£12,896 0 0 from the seventeen miles now opened.

If this amount of revenue (which does not embrace the amount to be derived from Coals and other produce above enumerated) were taken as a scale by which to estimate the probable nett revenue of the whole sixty-two miles, when completed, it would show a nett income of £47,000 per annum, being upwards of 9 per cent. per annum on the capital to be employed. But for the reasons already stated, such an estimate can give no adequate idea of the future revenue of the Company. If the communication were at this moment completed between Haydon and Newcastle, the income from Hexham would be at least double what it now is, with scarcely any perceptible addition to the current expenditure. At the western end of the Railway in particular, there will be an immense carriage of Coal and Lime to Carlisle and the neighbourhood. The Capital of the Company is £200,000, raised by 5,000 shares of £40 each. The Company has received a Loan of £100,000 from the Exchequer Hill Loan Office. The total Expenditure of the Company, up to the 18th of July last, was £246,731. It is estimated that the total further Expenditure for completing the whole line, from Newcastle to Carlisle Canal Basin, including engines, carriages, &c., will be £150,000. The Directors have power by Act of Parliament to raise, either by Loan or by creating additional Shares, any further sum which may be required for completing the undertaking, not exceeding £150,000.

Newcastle-on-Tyne, August 18, 1855.

Published by J. WEALE, Architectural Library, 59, High Holborn.

TREATISE ON ISOMETRIC DRAWING, as applicable to Geological and Mining Plans, Picturesque Delineations of Ornamental Grounds, Perspective Views and Working Plans of Buildings and Machinery, and to general purposes of Civil Engineering, with Details of Improved Methods of preserving Plans and Records of Subterranean Operations in Mining Districts, by T. SOPWITH, Land and Mine Surveyor, Member of the Institution of Civil Engineers, &c. With Thirty-four Copper-plate Engravings. Price 10s.

"We strongly recommend Mr. Sopwith's book, as by far the best, and, indeed, the only complete work that has yet appeared on the subject. Every mode of the application of isometrical Drawing is beautifully illustrated by engravings."

Architectural Magazine.

"The proprietors and conductors of mines, and all under them, would do well to study the whole of these sections attentively. The author's suggestions are all of a very sensible and practical character, accompanied with every necessary instruction for carrying them into complete effect."

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Just published, price 2s. 6d.

REMARKS upon the Objects and Advantages of the IMPERIAL ANGIO-BRAZILIAN CANAL, ROAD, BRIDGE, and LAND IMPROVEMENT COMPANY. Protector, His Imperial Majesty Don Pedro II. To which are prefixed, Translated Copies of the Decree of the Provincial Legislative Assembly of Rio de Janeiro, conceding certain exclusive Rights and Privileges to Mr. John Henry Pense, and of his Memorial to the General Legislative Assembly, praying for further concessions. Also a Map of the Province of Rio de Janeiro, showing the Lines of Intended Operations; and a coloured View of the Colony of São Paulo. London: Sold by Wacey (late Roosey), Old Broad-street; and by Dean and Munday, Throgmorton-street.

REVIEWS.

An Account of the Mining Districts of Alston Moor, Weardale, and Teesdale. By T. SOPWITH. J. BEALE, Architectural Library, 59, High Holborn.

This is as perfectly original a publication directed to the mining interests as the *Mining Journal*; and with a kindred spirit we take it up for review with the most kindly feelings. The work is written in a pleasing style, from which we purpose to extract largely, and which will at least show that the author does not pretend to more than rendering the publication one of utility; while it is a source of regret and surprise that we find so few who evince a disposition to afford information, Mr. T. Sopwith's work is valuable, because it is easily attainable, and its contents are in that familiar style, that those "who run may read." To the following extract we must confine our notice on the present occasion.

The following particulars on royal mines at that period are interesting data in the history of mining: "When the ore digged from any mine doth not yield, according to the rules of art, so much gold or silver as that the value thereof doth exceed the charge of refining, and loss of the baser metal wherein it is contained, then it is called *poor ore*, or a *poor mine*. On the contrary, when the ore yields so much gold or silver as to exceed in value the charge of refining and loss of the baser metal in which it is contained, then it is called *rich ore*, or a *MINE ROYAL*; appertaining to the king by his prerogative, and herein consists the honesty of the refiner, for some have made very great products from that very ore from which less skilful essayers could extract nothing." In the remainder of this, and in some other works, much curious information is afforded respecting the state of mining, and the various grants and immunities confirmed on mining adventures by the crown; but these particulars are in a great measure too minute and technical to be generally interesting in the present work. Alston afterwards became the property of the Hyltons, of Hylton Castle, in the county of Durham; and in 1611 a considerable portion of the lower parts of the manor adjoining the rivers Tyne and Trent, was granted in leases for 999 years, by Henry Hylton, subject to the payment of certain annual rents which amounted to £64, but, with some encroachments taken off, are now £53, and a fine of twenty times the rent every twenty-one years. The lead mines, on a survey made about this time, were reported to be nearly exhausted, and in 1629 the whole manor—including all the lord's rents and minerals, 120 acres of demesne land, with houses at Lowber and Mack Close, and a corn-mill at Alston—was sold to Sir Edward Radcliffe for £2500, and remained in that family till the confiscation of the estates of James, Earl of Derwentwater, in 1716. It was granted by the crown, in 1734, to the Royal Hospital for Seamen at Greenwich, and has since remained in the possession of the commissioners and governors in trust for that institution. Several other estates in the manor, and the adjoining manors of Whitley and Ale, have since been purchased, in addition to this valuable property. In form, the manor of Alston Moor nearly resembles a square of about 6½ miles, containing about 45 square miles, or 29,000 acres. It consists, as its name imports, chiefly of wild and barren land; a considerable portion of the elevated land in it affording only subsistence for the harder breeds of sheep, and an ample range for the sportsman. The division of common has in the course of the last twenty years greatly improved the appearance of the country, and in that period also several fine plantations have been reared, especially on the lands belonging to Greenwich Hospital. A narrow range of rich loam extends along the lower part of the valleys, producing luxuriant crops of fine meadow and rich pasture, with some few sheltered patches of corn, the extensive growth of which is prevented by the climate. Numerous gardens, and an extensive nursery, furnish ample proofs of the fertility of the soil in the valleys, which, if intersected with hedges in the place of naked stone walls, or scattered over with hedge-row trees, would yield to few situations for picturesque beauty. Newshill Bank, on the east side of the Tyne, comparatively speaking, may, in so bare a country, be said to be extensively wooded; it has a fine appearance from some points of view, and the addition of a few belts of plantation on the opposite hills would be a very considerable addition to the general appearance of the country. As it is, some of the scenery which it affords is considered highly interesting by most strangers, especially when the blue shades of evening impress a character of sublimity on the surrounding hills. This manor is described in one of Mr. Loeker's reports, in 1821, as the most valuable and interesting part of the landed property of Greenwich Hospital. The mines then yielding an annual produce of £100,000, and the lands producing a rental of about £12,000 per annum. These latter are divided into small farms and allotments, for the convenience of the miners, and are generally let to persons who obtain part of their livelihood by carrying ore from the mines to the smelting mills.

Railway Magazine, October. E. WILSON.

This periodical is again before us, and we wish that we could congratulate the editor on the originality of the matter it contains. As a compilation it is useful and interesting to all engaged in railways; and as there is a mania at this moment for embarking capital in undertakings of this nature, we hope that the encouragement the publication may meet with will induce the editor to apply himself to original sources for information, and thus render it of value as an authority, while it can only be considered at present a collection of newspaper paragraphs. In thus expressing the opinion we entertain, we are perhaps more immediately led to the subject by the price having been doubled, while the information conveyed certainly is not increased in importance in the same ratio. We ought not, however, to be too hard upon the editor, for we have quoted from him so fully, and anticipated his November Number, that he must take care the *Mining Journal* does not affect the *Railway Magazine*, to which we honestly wish all success; but it must be conducted differently.

London and Edinburgh Philosophical Magazine, October.

R. TAYLOR, London.

This very useful publication is one of the few directed to science, and as such, coming under our immediate consideration. From its varied contents, we have, in our present number, made extracts which will not only prove to our readers the opinion we entertain of the work, but we trust, be the means of extending its circulation. The exclusive privilege which we believe this publication enjoys, of giving the proceedings of the British Association, is not, however, in unison with the spirit which pervades the present age in the diffusion of knowledge, which demands a greater degree of liberality being exercised. We give every credit due to the talented editors of this publication, but we must confess we should feel better pleased to see contributions from their pens, rather than a mere copy of matter transmitted to them, whether from the British Association, or the Geological Society.

GEOLOGICAL MAP OF THE NORTH OF ENGLAND.

The several county maps which already exist of the northern counties of England, though answering most of the purposes of general reference, do not possess that degree of accuracy which is desirable for the ground work of a geological map of so important a district. This is not mentioned with any idea of disparagement to these publications, for it is quite beyond the means of any single individual, or of any limited company of persons to effect that extreme accuracy. To show, however, that this discrepancy is fatal to any dependence being placed on these and similar maps for minute purposes, such as the range of dykes or veins from one mine or district to another, &c. the following instances may be noticed, as occurring in a part of the county where such continuation of bearings, and the relative situation of different mines, &c. is of extreme importance; so much so, indeed, that in one instance, an error of even one yard in length would have involved a difference of nearly one thousand pounds.

The mining manor of Allendale consists of two valleys, formed by the east and west Allen rivers. In two recently published maps of the county, the distance of these rivers is a mile different for nearly the whole extent of these respective dales. From the mining village of Coalclough to that of Allendale, on one map is 5½ miles, on the other 5½ miles; being a difference of 1½ mile in this short distance. The important boundary referred to, from the north-east to the south-west extremity of Alston Moor, on one map is 7½ miles, on the other 5½ miles. From the same north-east angle of Alston Moor to a prominent angle of the county boundary south of

Allendale, is on one map 14½ miles, while the same points on the other map are within 8½ miles—these several distances being all measured in direct lines from point to point. It is obvious that any conclusions drawn from a geological map, projected on so erroneous a ground work, must be of little practical utility.

A correct Geological Map of the three northern counties would, indisputably, be a most invaluable acquisition to science, mining, and agriculture, while on such a map the insertion of any material error would be open to local, and probably minute investigation. The following remarks on the subject are offered with a view of drawing attention to that accuracy, on which the value of any local geological map must mainly depend.

A long period must elapse before the many valleys, mines, &c. which abound in the mountainous districts of the three northern counties, could receive any personal examination. The Basaltic range of rocks from Teesdale to Belford, the western escarpment of the Pennine range of hills, the various rocks of the Cumbrian mountains, the Tyne and Wear coal-fields, and many other portions of these counties, would require much careful investigation before any authentic and minute plan of their geological structure could be made. Without any further comment on the obstacles to speedily constructing geological county maps, I shall submit a few suggestions as to the most desirable mode of proceeding to illustrate the geology of these counties, and also concerning the ultimate completion of a large and correct geological map of the north of England. By way of more clearly explaining my views, I venture to define a mode of proceeding, which being merely offered for consideration, is, of course, open to every alteration and amendment that the opinions of others, or more mature experience, may suggest. Supposing, then, the work fairly commenced either by the Natural History Society, or some public body, under the auspices of the great coal and lead owners; it follows, that access could be had to many plans of land and mines, with permission to reduce them to any required scale. The engraved plans of Greenwich Hospital estates, Rennie's plans of the Tyne and Wear, the large manor plans of Alston, Allendale, and Whitfield, and many valuable plans of extensive property in the Newcastle coal district, would be valuable materials for such a collection; while, I need scarcely add, how much the professional aid of Mr. Buddle, Mr. Wood, and other active and willing promoters of geological science, might add to these preliminary data.

When once the collection was begun, and the object of it fully understood, materials would rapidly accumulate. I would propose that the more important parts of the district should then be selected and completed into maps of convenient size, say 10 inches square, which, on a scale of 2½ inches to a mile, would include an area of 16 square miles. Separate portions of which, on a larger scale, might also be drawn on plans of similar size, according to the geological details to be expressed on them. Accurate plans of such portions of districts being obtained, I would recommend that they should be very carefully engraved. Separate impressions of these maps should be coloured from existing geological maps—other impressions sent to gentlemen and mining agents residing in, or acquainted with such district, on which remarks and information might be inserted; while, from time to time, members of the society, conversant with geology and mining, might make scientific excursions, with copies of the maps in their hands, and thus record their several observations. A few well executed maps of this kind, constructed from these various sources of information, all brought as it were into one focus, would be of more real service than any general map of a large district can possibly be without such preliminary means of acquiring correct details. Having in this manner accomplished maps of certain districts, the corrected details might be laid on the copper plate plans, and the impressions being properly coloured, might either appear in the transactions of the Natural History Society, or be published separately. Two such plans, with a plate of sections, and a few pages of descriptive letter-press, would be a neat and useful mode of arranging them into a series of geological plans. A collection of fifty or sixty plans, comprising from 800 to 1000 square miles of the principal portions of the mining districts, with accompanying sections, drawings, and descriptions, would afford an admirable view of the geology of the north of England. Every portion of this series would present the results of careful personal observation, corrected by frequent inquiries and inspection. Fresh discoveries could at any time be added on the plates, and how many opportunities might not the lapse of eight or ten years afford, of gaining such accessions of knowledge. Repeated visits of scientific men, the opening of quarries, the sinking of shafts, borings, &c. might in this period tend to clear many difficulties which must be encountered, and perhaps very imperfectly overcome, in any attempt to construct at once a detailed geological map of so vast an extent of country.

The publication of a series of maps would, I imagine, tend far more to promote an acquaintance with, and general interest in geology, than that of a single large map. The letter-press, sections, and drawings, of each number, would be interesting to the public of each respective district. Many would examine, and learn to understand a map of the geological structure of the place in which they live, who would deem a county geological map far beyond either their interests or comprehension; and a printed cover of these numbers might also be a useful vehicle for publishing the nature and advantages of the ultimate objects in view. When, at length, a great number and variety of materials, manuscript or engraved, shall have been collected; when one portion of the district after another has been submitted to careful revision; when the published plans have benefited by criticism and amendment; when geological plans and sections have, at a moderate expense, been rendered familiar to the public eye; when charts of coasts, maps of parishes, plans and sections of mines, roads, and railways, and various data, shall have accumulated in the portfolios of the conductors of the undertaking; when these and similar advantages shall be accomplished, the construction of a large geological map may then be proceeded in with a degree of precision and utility which cannot otherwise be attainable. To the advantages already enumerated may be added the very important one, that previous to such general map being constructed, the ordinance surveys of the north of England may probably be completed. If to this were added the projection of meridian stations over the mining districts, the work would be complete. A map thus constructed, would possess accuracy of delineation, and minuteness of detail, commensurate with the importance of the districts comprised in it; would assuredly reflect the highest credit on the conductors of it; and form such a specimen of geological planning as has not hitherto been accomplished. — *Extracted from "A Treatise on Isometrical Drawing," by T. Sopwith, Land and Mine Surveyor.*

To the Editor of the Mining Journal.

SIR,—The very important and useful suggestions contained in the leading article of your last number cannot fail to strike public attention as a subject peculiarly interesting to the scientific world, and in which the interest of the miner is deeply involved, indeed, the interests of all those that are in any way connected with mining operations. The public, Sir, are largely indebted to you for the great mass of interesting intelligence circulated weekly through the medium of *The Mining Journal*, and I am quite sure that debt of obligation must be considerably increased by the able and well digested arguments you have employed in the introduction of a subject to public notice of so much importance as the establishment of a school of mines in this country. It has long been a disgrace to England, that she has not had her college for the diffusion of this exceedingly interesting and important branch of science, though she has been a mining country for centuries. There can be no doubt the want of such an institution has operated like a dead weight upon our progress in mining affairs; we want to see a more general combination of scientific with practical knowledge, and I do most sincerely hope, Mr. Editor, the appeal you have made in your valuable journal, in behalf of so excellent an institution will be responded to with a liberality of sentiment and patronage that will encourage you to persevere in so valuable an object. I trust the public need only to be shown the wants and advantages of such an institution, to induce them to afford you aid in the accomplishment of so noble an enterprise; I have no doubt but the public will be looking forward very anxiously to receive your plans and suggestions upon the subject.

The great ability with which you have introduced the subject would almost induce me to forbear making any remark, but perhaps I may be excused were I to notice your observations respecting the description of men sent abroad to manage many of the mining speculations there, and the value at which their services are estimated; men of mere practical knowledge (perhaps that is rating them too high), destitute of scientific information, are receiving there 500L. to 1000L. per annum; why, Sir, you might have said 2000L. to 3000L. per annum, and not have been beyond the mark, for these salaries have actually been given to men that never could have obtained the situation of a superintendent in any mine in Cornwall. I happen to be a shareholder in one of these splendid companies, where we

out our agent at a salary of £5000. per annum, and 3000. more for the money; but I forbear to tell you the value of the property at the present moment, as I will not venture to say that the ill success that has attended most of the South American speculations was the consequence of sending unqualified agents; but I may presume that a great deal of the misfortune may be traced to this source: men destitute of scientific knowledge are particularly unfit for the selection of mines;—and here I can cite a case in point; one of our agents (with a large salary) was commissioned to examine and report upon a certain mine, he pronounced it valueless; the same mine has since been taken by the natives, and is now working at a profit of 50,000 dollars per month. It is quite clear that the mining interest stands at a great disadvantage, unless they have men of scientific and practical knowledge to superintend these undertakings; and it is an indisputable fact, that there is a great dearth of scientific knowledge among most of our practical men: the plan you have suggested for the diffusion of this species of knowledge is certainly worthy of attention, encouragement, and support; all other professions have their seminaries for the education of their class; let the miner, then, have the best education that can be given to qualify him for his profession; it is an extremely important one; it involves the interests of thousands, and is one of the grand springs of our national wealth. Accept my best wishes for the success of the *Mining Journal*, and the interest you are so powerfully advocating.

EAST POOL MINE.

To the Editor of the *Mining Journal*.

Sir,—For the information of your correspondent who requested you to contradict your former statement respecting East Pool, I will endeavour to state circumstances so as to convince him that East Pool Mine is drained by East Wheel Crofty, Carn Brea, and Wheel Agar. At the time when East Wheel Crofty and East Pool worked formerly, there was a steam engine on the former; from which mine there was about 280 fathoms of horizontal rods at the surface, drawing the water from East Pool, in which mine there was a 16 fathoms level driven eastward through the cross course, out from which level there issued a large stream of water, which overflowed the eastern bottoms under the 16 fathoms level; there were, consequently, a set of horizontal rods working in the said level, and a lift of pumps to clear the water from the bottoms, in which there was a good course of ore. The sump shaft was sunk 3 fathoms 4 feet 6 inches under the 19 fathoms level, in which state the mine ceased working. At that time there were no Carn Brea mines, and Wheel Fortune (now Wheel Agar) was not working, therefore the eastern, northern, and southern ground was full of water; it is not therefore to be wondered at that a large stream of water should come out of the 16 fathoms level when it was driven through the cross course; that level, of course, was the only drain to take any water from Wheel Agar and Carn Brea ground. East Pool lay dormant 50 years. East Wheel Crofty, Carn Brea mines, and Wheel Agar started first; East Pool was cleared up down to the very bottom of the sump shaft, and there was not a pint of water to be seen in any part of the mine below add, even the stream which formerly came out of this level was all gone. Finding the sump dry, sinking was commenced; and in August and September, 1834, we sunk 2 fathoms 3 feet 5 inches, when we got down to the water. If the water was drained by East Wheel Crofty alone, why should they have gone to the expense of 280 fathoms of horizontal rods in the former working?

I should feel obliged by your inserting the above in your valuable and interesting Journal.

I am, Sir, Yours, &c.

AN ADVENTURER IN EAST POOL MINE.

GEOLOGICAL OBSERVATIONS.

At a Meeting of the Geological Society of London, on May 27, a paper was read, "On certain lines of elevation and dislocation of the new red sandstone of North Salop and Staffordshire, with an account of trap dykes in that formation, at Acton Reynolds, near Shrewsbury," by Roderick Impey Murchison, Esq., V.P.G.S. The author refers to former memoirs, read before the Society, in which he pointed out the existence of certain bedded trap rocks, interstratified with transition deposits, and of other intrusive trap rocks which have been subsequently injected amid these stratified masses. The Breidden Hills, west of Shrewsbury, afford examples of both these classes of trap rock, in ridges running from W.S.W. to E.N.E. and also indicate, upon their flanks, that elevations have taken place along these lines subsequently to the deposition of the adjoining coal measures. The author has lately discovered that still more recent movements of elevation have been propagated along the same line of fissure, posterior to the consolidation of the new red sandstone. He was led to this observation by the unexpected discovery of three small trap dykes beneath the house of Sir A. Corbet, Bart., at Acton Reynolds, which were accidentally laid open upon clearing out the foundations of that mansion. These dykes cut like walls through the new red sandstone, and are made up of a peculiar greenstone and a mottled concretionary felspar rock, both of which rocks occur in the Breidden Hills. Besides this similarity in structure, the principal dyke has precisely the same direction as the Breidden Hills, and hence the author was induced to examine the intervening tract of 15 miles by which these trap rocks are separated. The result has been, the detection of an antediluvial line throughout that space, along which the strata of the new red sandstone are thrown off, both to the S.W. and N.E. or at right angles to the line of elevation of the trap. The clearest and most unequivocal point in the course of this antediluvial line is seen in Pim Hill, six miles north of Shrewsbury, in the centre of which the sandstone is compact, white, and unstratified, with slickensides, coatings of earthy oxide of manganese, traces of copper ores, vertical fissures, &c., whilst strata of unaltered sandstone dip away from this common centre, both to the S.W. and N.E. This point of altered rock lies exactly upon the line connecting the Moely Goffa ridge of the Breidden with the trap dyke of Acton Reynolds. The line of elevation is further traceable for about 15 miles, to the E.N.E. of Acton Reynolds, usually throwing the strata into only dome shaped masses; but the Rev. T. Egerton has observed it passing the Liverpool and Birmingham canal 30 miles distant from the Breidden Hills. The author is of opinion that the hilly range of new red sandstone extending from the Ness Cliff Hills, by the south of Wem, into the Hawkstone and Hodnet Hills, and then prolonged by the south of Market Drayton, into the high grounds of Ashley Heath (parallel to the line extending from Moely Goffa through Acton Reynolds), has been affected by similar elevatory forces acting along a line proceeding from the focus of the principal ridge of the Breidden, or that on which Rodney's Pillar stands; and in corroboration of this, he alludes to the veined and metalliferous character of the red sandstone along this line, in which copper ores, manganese, &c. are of partial occurrence. Immense accumulations of coarse gravel and clay obscure the flanks, and sometimes hide, for vast spaces, the disturbed and denuded strata of red sandstone along the chief antediluvial line. Attention is then directed to the position of the lower strata of the new red sandstone around the coal fields of Colebrook Dale and South Staffordshire; and in confirmation of opinions expressed in former communications, the author cites several examples near Wolverhampton and Dudley, particularly one at Sedgely, where the coal itself is thrown up at an angle of about 40°, the strike being north and south, with the lower new red sandstone conformable to it; and from these evidences he concludes that the principal lines of fracture along the margin of these coal fields took place after the deposition of the new red sandstone series, and that, therefore, the break so prevalent in the south-west of England, between the upper part of the coal measures and the new red sandstone, can no longer be considered as of general application in English geology. From the amount of dislocation which has taken place throughout all this region, accompanied by an enormous destruction of masses of new red sandstone, and from the protrusion of so many points of trap rock, some of which cut through that formation, the author is disposed to think that the recently described outlier of lias at Cloverly and Prees, in Shropshire, may have been originally connected with the chief escarpment of lias in Warwickshire and Worcestershire, there being in the large accumulations of gravel in the intermediate country, many lias shells, which may have been derived from the destruction of once continuous strata of that formation.

In conclusion, he recapitulates what in former memoirs read to the Society he has endeavoured to show—1st, That certain trap rocks have been evolved during the formation of the transition rocks; 2ndly, That others have burst forth subsequently to the consolidation of these older strata, throwing them into vertical and broken forms, and producing metalliferous veins in them; 3rdly, That this period of activity was anterior to the formation of the coal measures, as is proved by the strata of the latter resting unconformably upon the highly inclined edges of the transition rocks. Carrying on the inquiry from this point, the present memoir demonstrates, 4thly, that igneous agency, evolving precisely similar products, has been

renewed at a much later period upon one of these lines of ancient elevation; and finally, that the great disruptions around the flanks of the central coal fields of England took place after the accumulation of the new red sandstone.

MINERAL PRODUCTIONS OF THE GLOBE.

Geologists are not required to be chemists or mineralogists, but they cannot safely be ignorant of the results of chemistry or mineralogy; for these frequently throw a strong light on the production of rocks, and sometimes remove all obscurity from their origin. Of 54 uncombined, and therefore called simple or elementary substances, known to chemists; five exist in a separate state only as gases, viz.: hydrogen, oxygen, azote, chlorine, (fluorine?) Seven are non-metallic solids and liquids; viz.: sulphur, phosphorus, selenium, iodine, bromine, boron, carbon. Thirteen are metallic, or metalloids, which unite with oxygen, to form the earths and alkalies; viz.: sodium, potassium, lithium, aluminum, silicon, yttrium, glucinum, thorium, calcium, magnesium, zirconium, strontium, barium. Twenty nine are what are commonly called metals: manganese, zinc, iron, tin, cadmium, arsenic, antimony, copper, molybdenum, uranium, tellurium, chromium, cerium, nickel, vanadium, cobalt, lead, tungsten, titanium, mercury, columbium, bismuth, osmium, silver, palladium, rhodium, platinum, gold, iridium. Oxygen combines with so many of these, and in such large quantities with the earthy and alkaline metalloids, which are the most predominant ingredients of minerals, that we may venture even to say, that one half of the ponderable matter of the exterior parts of the globe is composed of oxygen gas in a state of combination. The speculations to which this conduces, as to the concentration from a gaseous condition of the matter of the planetary system, seem to be in agreement with the astronomical views of Herschel and Laplace, but are perhaps beyond the range of geology, which considers not the origin of the globe, but its successive changes of condition. Were the attractive forces tending to bring together these elementary substances equal between every two of them, there might be as many minerals produced as there are possible combinations of fifty-four dissimilar numbers; and if, besides, they might unite in any proportions, the number of compounds resulting would be incomprehensibly great, and the constitution of minerals would be, in a certain sense, accidental. Nothing like this happens however; for, in the first place, the affinities between the substances are various in degree; and those which have the stronger attractions for each other unite and exclude feebler combinations; and, secondly, the several substances tend to combine, only in certain proportions, according to general and rigorous laws; the consequence is that the number of distinct minerals is not very great, and the constitution of each is exactly adjusted to a chemical formula. Perfectly crystallized minerals have both a regular geometrical form, and a certain internal symmetry of arrangement amongst their particles; sometimes the former character fails, and the latter is not to be discovered without refined optical researches; yet, as the constancy of the chemical composition of minerals appears to prove that their particles were aggregated, while at liberty to follow their natural tendencies, we must be cautious in affirming that any homogeneous minerals are devoid of a crystalline structure. But, this *theoretical* crystallization being beyond the test of observation, we may, with great convenience and practical accuracy, distinguish among the mineral productions of the globe two classes; the former containing evidently crystallized rocks and minerals, the latter apparently uncrystallized masses. When applied to rocks, this distinction is more clear and important than in classifying minerals. Rocks consisting of one or several crystallized minerals, which were obviously generated in the very mass where they occur, have a very different geological history, and suggest very different trains of reasoning from others composed of rolled or fragmented minerals, brought together by mechanical agency, such as the force of water. Compare, for instance, crystallized granite with coarse sandstone; the former tells us plainly that it has been generated by chemical forces operating upon matter in a state of fluidity, or under the powerful control of electricity; but the latter teaches us that not only heat, electricity, and chemical agency have been concerned in the production of the materials of the globe, but that the mechanical agency of water has been of great importance in modifying their results, and producing new aggregations. In determining whether rocks are of crystalline or of mechanical origin, some doubtful cases will occur, which experience alone, and this not always, can decide. The mean density or specific gravity of the whole mass of minerals near the surface of the earth is about twice and a half that of water; but astronomical and general physical researches equally prove, that the mean density of the whole planet is four or five times that of water; consequently, the matter in the interior of the earth is heavier than that near the surface. This is all we really know of the nature of the nucleus of the earth. Whether the substances of which it consists be of the same kind as some of those near the surface, or of another kind altogether, can only be matter of conjecture. By the aid of mechanical and astronomical considerations, we may indeed proceed so far as to learn the limits of rational theory on the subject; we shall find, for instance, that if the matter of the interior of the globe be compressible in the same degree as some of the substances near the surface, the accumulating pressure towards the centre would condense them far more than is necessary for the data mentioned above, unless there were some counteracting expansive force in the interior, such as heat is known to be. We must therefore allow, either that the interior substances of the globe have a totally different mechanical constitution from those which we see near the surface, or that an expansive force of great energy counteracts the compression to which they are subjected.—*Philips's Guide to Geology.*

ON AN ECONOMIC APPLICATION OF ELECTRO-MAGNETIC FORCES TO MANUFACTURING PURPOSES.

By ROBERT MALLEY.

Extracted from the proceedings of the British Association for the Advancement of Science, published in the *Philosophical Magazine*.

The separation of iron from brass and copper filings, &c., in workshops, for the purpose of the refusion of them into brass, is commonly effected by tedious manual labour. Several bar or horse-shoe magnets are fixed in a wooden handle, and are thrust, in various directions, through a dish or other vessel containing the brass and iron turnings, &c., and when the magnets have become loaded with iron it is swept off from them by frequent strokes of a brush. This is an exceedingly troublesome and inefficient process. It appeared to the author that a temporary magnet of great power, formed by the circulation of an electric current round a bar of iron, might be substituted advantageously. The following is the arrangement which he has adopted. Several large round bars of iron are bent into the form of the capital letter U, each leg being about six inches long. They are all coated with coils of silk covered wire, in the usual way of forming electro-magnets of such bars, and are then arranged vertically, at the interval of five or six inches from each other. All the wires from these coils are collected into one bundle at their respective poles, and there joined into one by soldering, a large wire being placed in the midst of them and amalgamated. A galvanic battery is provided, which, if care be taken in making the junctions at the poles, &c., need not exceed four or at most six pairs of plates, of from twenty inches to two feet square. The poles of this terminate in cups of mercury, which are so placed that the large terminal wires of all the coils can be dipped into them, or withdrawn easily. The rest of the arrangement is purely mechanical. The required motions are taken from any first mover, usually a steam engine. The previously described arrangement being complete, a chain of buckets is so contrived as to carry up and discharge over the top of the magnets a quantity of the mixed metallic particles: most of the iron adheres to the magnets, while the so far purified brass falls into a dish or tray placed beneath to receive it. This latter is also of a chain of dishes, the horizontal motion of which is so regulated that the interval between two dishes is immediately under the magnets, in the interval of time between two successive discharges of the mixed particles on the bars. At this juncture the communication between the galvanic battery and the magnets is interrupted by withdrawing the wires from the cups of mercury, and the result is, that the greatest part of the adhering iron drops off and falls in the space between the two dishes. The next dish now comes under the magnets, the communication is restored, and a fresh discharge from the buckets takes place, and so the process is continued. Some iron constantly adheres to the magnets, but this is found of no inconvenience as it bears but a small proportion to the total quantity separated. The author has had an imperfect apparatus of the sort above described at work for some time, and has found it to answer; and suggests the application of electro-magnets for somewhat analogous objects in various manufactures. He particularly mentions needle and other dry grinding.—*Philosophical Magazine.*

RAILWAYS.

SOUTH CAROLINA.—South Carolina has already completed the longest railroad, now in operation, in any part of the world. It extends from Charleston to Hamburg, on the Savannah river, opposite to Augusta, a distance of 133½ miles. It was commenced in 1830, and was opened for use, throughout, in 1833. It is built on piles, and may be considered as a continuous bridge. Its original cost, including preliminary surveys, locomotive engines, cars, depositories, inclined planes, stationary engines, purchase of land, &c., was 904,500 dollars. Where these piles are above the surface of the ground, it has been considered necessary to fill up the space with earth, and this has been partly done; and this, with other items, increased the cost of the road, up to October 31, 1834, to 1,336,615 dollars. The stock is considered valuable. From May to October, 1834, a period of six months, the company received, for transportation of passengers and cotton on this road, 83,445 dollars. The number of passengers, during this period, was 13,575, paying 33,140 dollars, and the quantity of cotton transported the same time, was 12,756 bales, and which paid 47,301 dollars.

GEORGIA.—In Georgia a company has been incorporated to make a road from Augusta to Athens, and we are informed that the stock has been taken up, the route surveyed, and will probably be made, and at an expense of about 10,000 dollars per mile. The distance is about 114 miles. This road is considered a continuation of the Charleston road, and naturally connected with it. From Athens it is contemplated to extend it to Decatur on the Tennessee river, and thus, in this direction, connect the trade of the west with the city of Charleston.

ALABAMA.—In Alabama, a railroad round the Muscle shoals in the Tennessee river, was finished about the 1st of December, 1834. It extends from Tusculum through Cortland to Decatur, a little more than forty five miles; twenty-five of which were made in 1834. This road must be advantageous to a great extent of country adjoining the Tennessee river, above the Muscle shoals; as that river above these shoals is navigable for steamboats as high up as Knoxville, a distance of about 400 miles.

KENTUCKY.—An important road of this character has been commenced in Kentucky, and will no doubt be soon completed. It extends from Lexington, through Frankfort, the seat of government, to Louisville, a distance of about ninety miles. The work upon it was commenced in April, 1833, but during the summer of 1833 was suspended, on account of the cholera. In September, 1834, twenty-three miles were finished; and by the 1st of January following, it was completed, and used to Frankfort, twenty-eight miles. The cost of this road, with a single track, was estimated at 1,032,000 dollars; and its actual expense thus far has not much exceeded the estimate; the estimated cost to Frankfort being 355,000 dollars, and the actual cost to that place was about 370,000 dollars. This road, we understand, has been built in a substantial manner.

WESTERN STATES.—Other roads of this kind have been contemplated and authorized in the western States, and some of them will, no doubt, ere long be finished. The state of Indiana has lately authorized a loan of about a million and a half to make similar roads in that State. In Louisiana, a Railroad has been completed from New Orleans to Lake Pontchartrain, about six miles, at an expense, including machinery and real estate, at 443,443 dollars.

AGGREGATE LENGTH.—The Railroads before noticed, which were completed on the 1st of January, 1835, or would not long after be completed, are in length, taken together, about 1600 miles, and their cost not far from 30,000,000 dollars. The aggregate length of those in Pennsylvania is about 418 miles, made at an expense estimated to exceed 7,000,000 dollars. When the cost of the Railroads in the United States is added to that of the canals, it will be found that there has been, or soon will be, expended in this country, on these two kinds of internal improvement, a sum not less than about 94,000,000 dollars; and this has been done principally since 1817.

SUMMARY.—In reviewing the foregoing brief account of the canals and Railroads of the United States, it will be perceived that the two principal objects originally contemplated in making them, have in a great measure been accomplished. A safe internal water communication, along or near the Atlantic sea board, has been completed—large vessels can now go from the Hudson to the Delaware, through the Raritan and Delaware canal; thence through the Delaware and Chesapeake canal, and Chesapeake bay, to Norfolk, in Virginia; and from Norfolk, through the Dismal Swamp canal, to Albemarle sound, in North Carolina. The eastern and western waters are now connected, not only from the Hudson to Lake Erie, through the State of New York, but also from the Delaware to the Ohio, and to the same lake, through Pennsylvania. This has greatly facilitated the intercourse between the east and west, to the immense advantage of both, and has bound them together by ties which, we trust, can never be broken. In addition to this evidence of the great and growing wealth and resources of this country, it will be remembered, that the United States, during the same period, have paid off a national debt of more than 120,000,000 dollars.—*Chambers's Journal.*

GREAT WESTERN RAILWAY.—The surfaces of the hills, through which the tunnels are to be made, on Langton Court farm and beyond it, for the construction of the Great Western Railway, show already in three places very deep cuttings; and a shaft has been sunk, more than 20 feet deep, near Netham Dam, by the river side. This is a spot where a bridge is across the river. Several hundred persons have already found employment between London and Reading, and Bath and Bristol.—*Cambridge.*

PROPOSED RAILWAY.—Since we last referred to the subject of the proposed branch, by which a junction will be effected with the Great Western Railway, a meeting, suggested by the directors of that undertaking, has been held here, which took place on Monday last. Many of the leading gentlemen, from different parts of the county, and the principal merchants, bankers, and others interested in the matter, from Gloucester, Stroud, Cirencester, and other towns, attended on the occasion. There was also a deputation from the directors of the Great Western Railway present. After considerable discussion, the resolutions were agreed to, and the meeting separated.—*Cheltenham Chron.*

RAILWAY FROM GLOUCESTER TO BIRMINGHAM.—We have it now in our power to announce, that this railway is likely to be carried into effect. Deputations from Birmingham and Gloucester met at the Star Hotel, in this city, yesterday, to discuss the subject. These deputations consisted of gentlemen of great influence, whose character forms a guarantee for the spirited prosecution of the project. A plan of the line was produced, and appeared to be generally approved, though of course it is subject to some variations as circumstances might render expedient. We do not profess to know the line accurately, but we believe it will pass near Cheltenham and Tewkesbury, within two miles of the eastern side of Worcester, and within one of Droitwich. The estimated expense is 7,600,000.—*Worcester Journal.*

GRAND ATLANTIC RAILROAD.—On Saturday last, the meeting adjourned from Wednesday, the 2d instant, for the purpose of forwarding the contemplated railway between the metropolis and the Atlantic ocean, was held in the Court house of Castlebar, and was most respectably and numerously attended. Sir S. O'Malley, Bart., who was called to the chair, stated that the whole expenditure would be about 2,400,000 £, so as to give communication to Galway, Castlebar, Ballina, Sligo, and passing through the other principal and important towns of the county.—*Mayo Constitution.*

RAILWAYS IN IRELAND.—The celebrated traveller, Captain Sir John Franklin, R.N., attended a railway meeting at Westport, on Friday, and took a great interest in the proceedings; he examined the charts of the coast most minutely, and seemed perfectly satisfied that Clew Bay was the most eligible harbour on the Western Coast. The idea of uniting Black Bod and Broad Haven, by a canal, he considered an absurdity.—*Dublin Evening Packet.*

LIVERPOOL AND MANCHESTER RAILWAY.—The receipts for the past half-year are—

Coaching department	£	3	4
Merchandise do.	52,837	1	4
Coal do.	48,331	1	4
	3,498	11	4
Total expenses, including interest ..	90,574	16	0
Net profit for six months	61,814	6	2
	£37,660	9	10

Which pays the usual half-yearly dividend of 4½ per cent., leaving a surplus of more than £2000. The expense of the locomotive powers are still heavy, amounting (including the purchase of three new engines) to £16,492. The cost of repairing engines altogether amounts to £7,694 £s. 4s.—*Chambers's Journal.*

GATESHEAD, SOUTH SHIELDS, AND MONKWEARMOUTH RAILWAY.—We gather from the prospectus of this undertaking that the outlay on the

main line of 10 miles and 57 chains amounts to £73,584; and upon the five branches, the length of which is 4 miles and 28 chains, the cost is estimated at £12,599; to which is added parliamentary charges and contingencies of £12,918; making, with the cost for locomotive engines, &c., in all £120,941. The revenue expected to be derived is £30,916. Shewing 25 per cent. interest on the capital; while Mr. Harrison's experience as an engineer, will, we doubt not, establish the correctness of these estimates. The annual expenditure is set down at £12,345.

LONDON AND BRIGHTON RAILWAY.—Capital, £900,000, in Shares of £20. The line surveyed by Mr. Gibbs, by way of the Greenwich and Croydon Railways, thence by Horsham and Shoreham.

HULL AND SELBY RAILWAY.—Capital £270,000, in Shares of £50 each. Deposit £1 per Share. In 1830, the persons principally interested in the trade from Leeds and the eastern parts of Yorkshire to Hull, entered into a subscription for a railway from Leeds to Selby, and thence to Hull, now one of the finest ports in the kingdom. The portion from Leeds to Selby (20 miles) was opened in September, 1834, and is acknowledged to be one of the best works of the kind in the country. The number of passengers in the first year was more than double the number estimated, and is regularly increasing, as is also the quantity of goods and minerals; and the shares which were at a discount 12 months ago are now in great demand at a premium.

LONDON AND BLACKWALL RAILWAY AND STEAM NAVIGATION DEPOT COMPANY.—Capital £600,000, divided into 12,000 Shares, of £50 each.—The principal objects of the undertaking are for conveying goods from the West and East India Docks, the conveyance of passengers to and from the Docks and Blackwall, the embarking and disembarking passengers to and from the various steam packets at Blackwall, and the landing of coal there, at all times of the tide, with great facility. This company has to contend with the Commercial Road Company; there must doubtless be a compromise.

GREAT NORTHERN RAILWAY.—London to York, Cambridge, Lincoln, Selby, and Norwich. Capital—£2,000,000, in Shares of £100 each.—Deposit £3 per share. The Railway will commence at Whitechapel, and proceed near Duntow to Cambridge, from whence, in an undeviating line, it will extend to Lincoln, passing through Sleaford and Selby to York. The Railway will pass near Auntinfidon, Ely, Peterborough, Wisbeach, Market Deeping, Grantham, Newark, Gainsborough, Doncaster, Tharn, Snaith, and Howden. By the junction with the Leeds and Selby Railway, a perfect communication will be made with Leeds, Bradford, Halifax, Huddersfield, and the other great manufacturing towns in that district.

THE LONDON GRAND JUNCTION RAILWAY.—to join the Birmingham and other Railroads at Camden-town, and proceed from thence to Snow-hill, and the river Thames, thus forming a magnificent uninterrupted entrance to the city of London and the Thames, from the North and West of England. The line selected will commence at Camden-town, joining the Birmingham and Great Western Railways, and proceed from thence by Battle-bridge, Clerkenwell, and Snow-hill, to the Thames. From Battle-bridge to Snow-hill it is proposed to form a viaduct for common carriages and foot passengers, and a sub-railway for the locomotive carriages, lighted on both sides by areas.

RAILWAY FROM LAUNCESTON TO CALSTOCK.—On Thursday, the 10th ult., a meeting was held at the Guildhall, Launceston. Thomas Ching, Esq., the Mayor, was unanimously called to the chair. He opened the meeting by stating the objects for which it was convened; being for the purpose of taking into consideration the propriety of constructing a railway from below the Wearhead in the Tamar River, in the parish of Calstock, to Launceston, and of determining on future proceedings, when a preliminary report on the proposed line, and calculations of the probable cost and returns of the undertaking, will be laid before the meeting by Messrs. Hopkins and Sons, Civil Engineers. From the report of the engineer we collect that the country is exceedingly favorable to a line of railway, with only one tunnel. The length of the whole line will be about 15 miles, and the rise about 212 feet. The expense of its construction, and the necessary contingencies, £35,000.—*Plymouth Herald.*

RAILWAYS.—The advantage to be derived by the community from the establishment of railways is so self evident, that it is a duty imposed on us to afford all information relating to these adventures. We propose in our next number giving a list of the various companies formed, the capital required, the amount paid, and the number of shares and the premiums which they command; in the meanwhile the following notes of railway intelligence may be deemed of interest.

SOUTH EASTERN RAILWAY, communicating with Tunbridge Wells and Brighton. The surveys and estimates for the formation of a railway, combining the traffic of the weald of Kent and east of Sussex, including that of Tunbridge Wells and Brighton, have been completed.

LANELLY RAILWAY AND DOCK COMPANY.—Incorporated by act of parliament. Capital 200,000*l.*, in shares of 100*l.* each, payable by instalments; deposit 5*l.* per share. A substantial dock, capable of containing a large number of vessels, and a certain extent of railway, have been already completed, by which a considerable trade is now carried on; but it being highly desirable that the line should be extended, an act of parliament has been obtained in the present session to empower the company to raise the above capital, and to carry the railway nearly 20 miles through a district abounding with coal, stone coal, culm, and lime stone, iron stone, and minerals, which have hitherto remained in great part unworked, and which may thus be brought down for shipment at the dock of Llanelly.

PHILIPSBURG AND JUNIATA RAILROAD IN PENNSYLVANIA, NORTH AMERICA.—A report of this company has been made by the board of directors and the surveyor, Muncie Robinson, Esq. The line of road will embrace 28½ miles; the expense of construction will, it is estimated, fall within 300,000 dollars, or 65,000*l.* (a sum comparatively small, arising from the materials being found on all parts of the line). The lowest estimate of returns from coal, timber, pig and bar iron, agricultural produce, merchandise, &c., without noticing passengers—after liquidating all expenses and providing for all necessary repairs, will yield a dividend of 10 per cent, which will be ensured from the tonnage from the extensive Philippsburg bituminous coal mines alone.

TO CORRESPONDENTS.

The explanations of our Cornish friend with respect to Captain Joe, is perfectly satisfactory.—Chapter II. in our next.

We owe to F. B. the contributor of several papers to the *Mining Review*, our apologies for having extracted matter embodied in "Mining Statistics," from that work, without citing the authority. We should be glad to find him a correspondent of the *Mining Journal*.

Will an "Engineer of 30 years' standing," favour us with an interview? We doubt the authenticity of the paper with the signature "J. Galt." The writer may have it on application at the office.

The Steam Engine Duty papers will form subject matter for our next Number.

"R. T." No.

Why does not "An Inquirer" furnish us with information which he is so capable of doing, instead of putting queries to which he must be sensible we have not the means of replying.

We have inserted Amos' communication; it is but one of many we have received on the subject, some of which have been accompanied by proffers of "the needful." We regret that the decided opposition of parties in Cornwall preclude us from rendering the *Mining Journal* so useful as we could wish. Where information could be afforded, the agents dare not furnish it. The "Great Captain" of the day need be under no apprehensions as regards publicity.

THE MINING JOURNAL

AND COMMERCIAL GAZETTE.

LONDON, October 10, 1835.

In our preceding Number we directed attention to a subject not only interesting but important, that of the establishment of a School of Mines. We have received several communications and suggestions, as well as promises of support, and already have steps been taken well calculated to ensure success, not only from the high patronage which we contemplate, but the pecuniary aid necessary to carry into effect the object we have in view.

We purpose, next week, submitting our plan, and the suggestions of Correspondents, in the expectation that we shall meet with that cordial support from the mining interest which has been hitherto denied to *The Mining Journal*.

The Railway mania, which has caused so considerable an advance in the price of Railway Shares, is a subject to which

we have to direct the serious attention of capitalists—the extent to which speculation is carried calls for observation, and while we cheerfully lend our aid in promoting these national undertakings, we feel it our duty to direct attention to the prices which the Shares have attained. The London and Greenwich Railway Shares have advanced from £3. premium to £10.—the London and Birmingham have arrived at £50. premium, without any other cause than that arising from speculation—and we find that to Brighton there are three lines, to Blackwall two, the Great Northern has a competitor, and it requires only another week like the past to establish lines of Railway throughout the United Kingdom, superseding all the present modes of conveyance. We recommend parties to "look before they leap," for they must calculate upon a reaction. The amount subscribed is not, perhaps, to that extent calculated to create alarm; but when we reflect that in the case of the London and Greenwich, in addition to the capital of £400,000, that the premiums on the shares alone amount to £200,000.; that with £36. per share paid on the London and Birmingham £50. premium is the current price, we must confess it appears to us that these prices are without reference to the intrinsic value of the Shares, being simply the result of operations in the Market. The Liverpool and Manchester Railway has been cited as an instance of success attending operations of this nature; but this line possesses peculiar advantages which are not analogous to many of the undertakings brought forward at the present day. In closing our remarks on this subject, we have only to direct attention to the number of Shares of which the several Companies are constituted, in most instances 20,000 Shares—and an advance of £1. per Share, it must be remembered, is £20,000. additional value set upon the undertaking; while as in the case of the London and Greenwich, it will require a profit of £30,000 per annum to yield 5 per cent. on the capital embarked, at the present price of the shares requiring no less than 1,200,000 passengers annually, at 6*d.* each. Assuming that it were all profit to yield such returns.

THE FUNDS.

CITY.—FRIDAY EVENING.

The spirit of enterprise or speculation, which is always more or less prevalent in London, and which, independently of its important political and domestic results, forms no small portion of business in the metropolis, has been within the last month mainly directed to the subject of railroads. After a week of very active business in the shares of companies already established by Act of Parliament, and in the shares of some others for which legislative sanction will be sought next session, the prices of the undermentioned close this evening as follows, viz.

Birmingham, £48 to £50 pm. per sh. Grand Western, £6 to £6 10s pm.
Croydon, 1 2 ditto Southampton, £1 discount.
Greenwich, 9 10 ditto

With regard to the intended Railway from London to Brighton, for which more surveys have been already made than will probably ever be made for any other, the opinion of the public seems to be finally established that the western line of country, namely, that by Dorking and Horsham, the surveys of which have been concluded by Mr. Gibbs, of the Croydon Railway, and by Mr. George Stephenson, for the Southampton Company, will be forthwith carried into effect. This line will have the advantage of two termini, one ending at Tooley-street, by way of the Croydon and Greenwich Railway, for the city traffic, and the other will take passengers from the west end of the town, from Nine Elms, by the Southampton Railroad.

Although these surveys have been made for two companies, viz. the Croydon Railroad Company and the Southampton, it seems most probable that they will be finally united, in order the more readily to complete the amount of capital required, and to save the expenses of rival proceedings in parliament.

Owing to the comparatively high prices of the British funds, and of the continental bonds and stocks, which enjoy the highest credit, and to the prevalent disposition to transfer capital and enterprise to rail roads, the business transacted in all the former has been on a very limited scale throughout the week.

Consols commenced on Saturday at 90½, and rose on Monday to 91½. This improvement appears to have proceeded from the general belief entertained that the congress of northern powers at Toplitz have been engaged almost exclusively in their own affairs; whatever their opinions may be, it is well known that Austria and Prussia see the prudence of not interfering with the policy of western Europe. As to the affairs of Spain and Portugal, it is not probable that these powers will become the tools of Russia—they will not involve themselves any further with England than to express their dissatisfaction, and to make mere diplomatic representations; with any regard to the public opinion of Germany they must necessarily do so in a very moderate tone, and however they may word them, these powers know well enough that the British people and government will not be diverted from openly favouring the progress of public liberty and internal improvement in the whole peninsula.

As to the opposition manifested by the French newspapers, and while emanating no doubt from the isolated Court and Cabinet of the King of the French, this is but little regarded in the City. It is well known that the French Government, though secretly allied with the Northern powers, is far too weak and unpopular at home to think of interfering by force, and against public opinion, in the affairs of Spain, and least of all for the purpose, as it wishes in secret to do, of putting down Mendizabel's Government and setting up Don Carlos.

Consols close this evening at 90½. The decline appears to be owing chiefly to the continued demand for money at an increased rate of interest. There is no doubt that this state of things is produced first by the general increase of business both real and speculative; and secondly, by the restriction of the Paper Currency, to which the Bank of England, and the paper issuing banks, must adhere, while the specie balance of the former remains as it has done (for months past) in a low state, and without increase. Added to the higher rate of interest, the depressed prices, and East India Bonds and Exchequer Bills which are fallen respectively to 2s. and 15s. premium only, are unerring symptoms of the state of the Money Market.

In the mean time there are no appearances of discouragement; the prices of French Funds continuing to rise, and, therefore, to favour the transmission of money into this market. The Commissioners for West India Claims have also purchased during the week about £120,000 consols, and the Bank of England also gave notice yesterday that it would continue its advances upon stock, bills, and securities, at 3½ per cent. for one month from 20th October.

Considerable variations have taken place this week in the price of Spanish Bonds. Cortes opened on Saturday 42½; rose on Wednesday to 43½, and close this evening about 44.

The rise was owing to the advice received from Madrid, that M. Mendizabel has at length formed his administration; that it consists of men generally known for their disposition to political reforms, and the internal improvement of the country; that the provinces are generally satisfied with the change, and with the new appointments of Captains-general, and that several, particularly Galicia and Valencia have resigned the separate powers of government, which the crooked policy of Torneo had compelled them to assume.

It is generally understood, however, that Catalonia, which is the richest, the most industrious and intelligent of all the provinces, and, therefore, more alive to the misgovernment, and to the system of political fraud, which the successive general governments have practised for centuries, has declined to lay down its separate powers.

Although the convocation of the Cortes is fixed for the middle of November, this province would have been more fully satisfied if a dissolution had taken place, and a fresh Cortes had been called under a royal statute, containing more liberal electoral franchises. Having raised and embodied a

patriotic militia of about 60,000 men, Catalonia maintains its position, not for offence, but as a security that the Madrid government, which has so often deceived the liberal party, will not abandon its newly declared principles.

The prices of the leading funds and securities close this evening as follows:—

BRITISH FUNDS.		FOREIGN FUNDS.	
Consols, for money, 90½		Russian do. 5 pr. Ct. 107	
New 3½ per Cents. 99		Dutch do. 2½ do. 54½	
3½ per Cents. Reduced 99½		Do. 5 do. 100½	
Omnium, 3½ pm.		Spanish Cortes, 43½ 44½	
Exch. Bills, 14s. 16s. pm.		Do. active, 183½ 41½	
India Bonds, 1s. 3s.		Do. passive, 12½	
		Do. deferred, 19½ 20	
		Portuguese do. 5 do. 87½ 88	
		Do. 3 do. 57½	
		Mexico, 6 do. 38½	
		Columbian, 6 ur. Ct. 32½ 33	

LATEST INTELLIGENCE.

Redruth, Oct. 8.—The standard is rather lower to-day, being £107. 6s. the amount of sale, £24,777: 13: 6*d.* Great Wheal Fortune, and the mines contiguous, had a large parcel, which obtained good prices. Carn Brea, which sold largely, is said to be looking well; the ore now raising is from three lodes.

Liverpool, Oct. 8.—There is much interest excited here, from the advance which has taken place in Railway Shares. Some of our principal merchants are large holders, and investments of this nature are in much favour.

Callington, Oct. 7.—At Wheal Brothers they are going on much as usual; returning silver to some extent. The sinking of the shaft is in progress. At Wheal Sisters they may be expected next week to raise ore.

Swansea, Oct. 7.—The Iron trade is looking up: the houses generally are full of orders, and the late advance in Staffordshire has given confidence. There is a brisk demand for bars, and the formation of the numerous Companies for Railways tends to keep up prices.

PURCHASES OF ORE AT REDRUTH, Oct. 8th, 1835.

Purchasers.	Mine.	Tons.	Per Ton.	Amount.	
No.	Mines Rl.			£. s. d.	£. s. d.
1. Mines Rl. Comp.	Carn Brea	38	4 8 6	168 3 0	
	Gt. Wl. Fortune	47	5 14 6	269 1 6	
	Wheal Tolgus	95	6 12 0	627 0 0	
	Wl. Unity Wood	80	3 16 6	306 0 0	
	21	6 15 6	142 5 6	
	18	3 2 6	55 5 0	
	Wl. Beauchamp	51	5 6 6	271 11 6	
	Wheal Buller	19	3 6 6	63 3 6	1903 10 0
2. English Cop. Co.	Binner Downs	101	5 11 0	560 11 0	
	Wl. Unity Wood	56	3 6 0	186 16 0	745 7
3. Vian & Sons.	Carn Brea	48	3 5 0	156 0 0	
	Tresavean	116	6 12 0	705 12 0	
	Gt. Wl. Fortune	93	7 2 6	662 12 6	
	80	10 13 0	852 0 0	
	Wheal Bolton	101	9 0 6	911 10 6	
	Rospath	66	10 6 6	681 9 0	
	Binner Downs	25	3 0 6	75 12 6	
	Wheal Virgin	39	2 2 6	61 12 6	
	Wheal Julia	43	8 7 6	360 2 6	
	14	5 7 0	77 11 6	
	Wheal Mary	57	4 18 0	279 6 0	4984 3 0
4. Freeman and Co.	Gt. Wl. Fortune	47	5 14 6	269 1 6	
	Wheal Tolgus	95	6 12 0	627 0 0	
	Wl. Unity Wood	80	3 16 6	306 0 0	
	Wheal Virgin	79	4 8 6	343 11 6	
	74	4 12 6	342 5 0	1353 1 6
5. Grenfell & Sons.	Tresavean	95	5 8 0	513 0 0	
	90	8 15 6	789 15 0	
	85	8 5 0	701 5 0	
	70	7 18 0	553 0 0	
	Wheal Tolgus	48	7 1 6	339 12 0	
	36	6 6 0	225 16 0	
	Wheal Julia	14	5 7 0	77 11 6	3080 19 6
6. Crown Copper Co.	Wheal Tolgus	48	7 1 6	339 12 0	
	Wheal Virgin	79	4 8 6	343 11 6	
	Hallamanning	30	14 0 6	194 5 6	1039 2 6
7. Nevill, Sims, Druce, & Co.	Carn Brea	102	7 12 6	777 15 0	
	73	8 14 6	645 13 0	
	70	7 12 6	556 12 6	
	70	7 16 6	547 15 0	
	67	7 19 0	532 13 0	
	Binner Downs	66	4 6 0	283 16 0	
	63	5 14 0	359 2 0	
	48	6 11 0	314 8 0	
	38	4 19 0	138 12 0	
	Fowey Consols	84	4 9 0	373 16 0	
	W. Unity Wood	53	8 10 0	425 10 0	
	Marazion	88	7 7 6	649 0 0	
	46	7 3 0	328 18 0	5058 10 6
8. Williams, Foster & Co.	Carn Brea	40	15 10 0	759 10 0	
	Binner Downs	61	3 13 6	224 3 6	
	39	2 19 6	116 0 0	
	Fowey Consols	100	5 2 6	510 0 0	
	93	6 6 6	588 4 6	
	44	5 18 6	269 14 0	
	Wl. Unity Wood	28	1 13 6	46 18 0	
	Marazion	35	2 18 0	100 12 6	
	30	2 18 0	87 0 0	
	Levant	304	14 4 0	866 4 0	
	Hallamanning	30	12 13 0	378 0 0	
	Lanescot	28	5 18 0	129 16 0	
	Herland	35	8 12 6	301 17 6	4825 3 6
10. George Wildes & Co.	Fowey Consols	44	5 18 6	321 8 0	
	Levant	304	14 4 0	433 2 0	
	Ditto	30	12 12 0	378 0 0	
	Hallamanning	22	5 18 0	129 16 0	1462 6 0

ELEVATION OF LAND.

At a meeting of the Geological Society of London in February last, a letter was read from Lieut. Freyer, R.N. addressed to C. Lyell, Esq., P.G.S., on the appearance of elevation of land on the west coast of South America. The localities alluded to in this letter are Arica, lat. 18° 26' south, the island of San Lorenzo in the Bay of Callao, and Valparaiso. Mr. Freyer states, that on his first arrival at Arica he was struck by finding shells, in very great abundance, at considerable heights above the present level of the sea. To the north of the town the coast is low, with a shingly beach and sandy plains, no rock being exposed; but he here found shells of existing species ten or twelve feet above high-water mark. On the south are interesting sections, consisting of innumerable thin beds of red sandstone and gypsum, resting upon shale, in which fragments of fossil shells were noticed. The bold promontory called the Morro of Arica, is formed by the dislocation and elevation of this sandstone to the height of about 400 feet, by a mass of basalt, porphyry, and pitchstone, which pass insensibly into each other. Near the summit of the Morro, the sandstone contains layers of a salt, consisting of chlorine 31.6, sodium 31.6, sulphuric acid 14.0, lime 9.45, potash and magnesia 9.0, insoluble (silica) 4.0. [The author states that this analysis was made by his friend Major Emmett, R.E.] South of the Morro, the sandstone and gypsum beds have a small southerly dip, and form indistinct terraces towards the shore. On these terraces, wherever the rock is exposed, balani and encrusting millepora are found. At the height of about twenty or thirty feet above the sea they are as abundant, and almost as perfect, as on the shore; at upwards of fifty feet they still occur, but abraded by the sand constantly blowing over them; and there are traces of them at still greater heights. In the island of San Lorenzo in the Bay of Callao, Mr. Freyer found, at considerable heights, *Concholepta*, *Pecten purpureus*, *Sigaretus concavus*, with other shells, in great abundance, and retaining their colour almost as freshly as those living in the adjacent sea. Mr. Freyer states that he did not visit Concepcion, but that he had seen cargoes of the lime made from the shells found at great heights in its neighbourhood. With respect to Valparaiso, he regrets he did not more attentively examine the neighbourhood; but he says, that to the east of the town the shelly beach is now far above the reach of the tides, and that rocks were pointed out to him, which he was assured were under water previously to the earthquake of 1822.

MINING STATISTICS.

CARN BREA.—These consist of Wheal Fanny, Tregajorran, the Druid, and Burncoose Mines, and are situated in the parish of Illogan, between Redruth and Camborne; the extent of the set on the run of the lodes is upwards of 1000 fathoms. There are three lodes now working, but several other lodes in the set are known to exist. The depth from surface to adit level is 24 fathoms. The depth of mine below adit 105 fathoms. The quantity of ore raised for the last twelve months, ending 30th June, was 3,691 tons, yielding £26,144 11s., or £7 1 6d. per ton; since which period the sales of ore have increased the amount by 2,116 tons, yielding £16,876 4s. The number of persons employed are from 4 to 500. There is one water wheel, of 39 feet diameter, which is applied to crushing or grinding the ores; the steam power consists of one engine of 76-inch cylinder, two of 16, and one of 24. The number of shares into which the mine is divided is 1000. The principal agent or captain is Captain Joseph Lyle. A dividend of £3 per share has been lately declared, and the discoveries of late have far exceeded any expectations which could be entertained.

MINING CORRESPONDENCE.

FOREIGN MINES.

COLOMBIAN MINING COMPANY.—*Marmato, June 23, 1835.*—*Mine Department.*—The underground works on the salt lode have been continued since Mr. Degenhardt's last report, without any thing particular to communicate. *Sebastiana Extraction Level.*—Upwards of 300 tons of mineral have been brought to grass since commencing tramming in this extraction level, and during the month of July I have no doubt that we shall have a much better proof of the advantages to be derived from this source of extraction. *Caparral Extraction Level.*—The mason has made good progress, 3½ fathoms are completed, and about 3 fathoms more will, I trust, place the level in a state of security. *Native Labourers.*—It is satisfactory to state that almost daily applications are being made by natives for employment at this establishment, and for permission to build houses in the new village. *The Weather.*—The fall of rain since the 25th ult. to yesterday inclusive, 11 inches 1½ths. We have experienced a slight change in the weather during the past few days, and it is the period at which the fine weather usually sets in. *Stamper at Work.*—From 25th May to 24th June inclusive, the average number has been 28½ heads, at 40 blows per minute, during which time there has been stamped 768½ tons of rough ore, and 6¼ tons of tails.

G. WILLIAMSON.
July 2, 1835.—*Raising Ore.*—During June, 1018 tons of ore have been extracted, of which there have been stamped 768 tons, the remaining 250 tons are lodged in the Sebastiana floor, and will be conveyed to the stamps in the present month. On the 25th of June, I set a bargain to throw down the 390 tons of picked ore lodged on the San José floor, for the sum of \$30 (which makes nearly 2 real per ton) to the Sebastiana floor; this, I believe, will be accomplished by the 4th of July. It is intended to keep this mineral separate, on account of its richness, and will be conveyed to the stamps from 6th of July. Mr. Luis Degenhardt intends stamping it separately from the other mineral, which may be poorer. According to several average samples taken by Mr. Leay and myself, the ore contains 2 oz. 10 dwts. 4 grs. fine gold, per ton, or the whole 390 tons will contain 590 oz. 5 dwts. of fine gold. This quantity of rich mineral, in addition to the ore we shall break and extract during this month, leads us to expect very handsome returns for the month of July, and I fully hope, that from the 7th of July we shall be able to put all the stamps in activity. *Extraction Levels.*—The trammers in the Escalastica level have been several days idle during this month, and to the present time they bring the ore to grass as fast as it can be broken. The same has occurred in the Cruzada extraction level, where, from the 23rd of June to 1st July, nothing but attle has been brought to draft from the Cruzada end, which has been discontinued since October, 1834, on account of being very poor and hard, and having much attle lodged in the end. This is the chief cause why the stamps from the 26th to the 30th of June have been so badly supplied with mineral since the 1st of July. Tramming has regularly continued in this level. In the Sebastiana level the trammers have not been idle to the present time, and will also have a full supply for this month, principally owing to the famous stopes Nos. 6, 29, 47, and 48, east of Goldsworthy's rise. I am glad to have an opportunity again to prove that the Escalastica, Cruzada, and Sebastiana extraction levels are more than adequate to supply much more than the demand which may be expected from the present Cruzada lode only, and it is clear that no limit can oppose itself to extensive success in extracting the ore in the deficiency of extraction levels for bringing mineral from the Cruzada lode only, and for the same purpose I have in the first instances commenced with good and proper situated extraction levels, on the Candade and Caparral lodes, the expenses of which, I allow, are rather great, but the compensation derived therefrom hereafter will also be great.

C. DEGENHART.
Returns for June.—The returns for June are comprised in 8 ingots. The assay contents of 63 lbs. 11 oz. 15 dwts. amount to 54 lbs. 3 dwts. fine gold, and 28 lbs. 8 oz. 9 dwts. fine silver. The consumption of quicksilver amounts to 5773 oz. Troy, or 5.50 parts. *July 7.*—Average number of heads at work to date, 28½; speed of stamps, 40 blows per minute; fall of rain, 1½ inches.

ENGLISH MINES.

NORTH CONSOLIDATED MINING COMPANY.—*Oct. 3, 1835.*—Eight men and 4 boys sinking the engine shaft under the 50 fm. level, the ground is much the same as it has been as to speed in sinking, and the colour of the rock is altering, it is turning from a blue to a lighter colour, which miners do very much approve of, and call it good indication for yellow ore. Four men driving the 30 fathom level north, from engine shaft to cut the caunter lode, there is no alteration for some time past. Four men and 4 boys clearing the 30 fathom level west from engine shaft. We find no end as yet. Four men driving the 20 fathom level north, from engine shaft to cut the caunter lode, not cut the lode as yet. Four men driving the 50 fathom level north, from engine shaft, to cut the caunter lode; no alteration since our last report. Two men driving the 20 fathom level east from engine shaft on the great lode, the lode still large, but do not find any improvement. Eight men and 4 boys sinking Williams's shaft under the 10 fm. level, the ground is so speedy as we may expect, but we find an increase in the water; but still we hope to be able to sink as deep as to cut the caunter lode in the shaft, that will be about the 20 fathom level. Four men clearing a shaft called Bartle's Shaft from the shallow adits towards the deep adit. Six men driving and sinking on the caunter lode at Williams's shaft, the ground very speedy, with a small quantity of ore, and a great quantity of jack. Six men in the new shaft, called Quarry Shaft. We are down about 6 fathom from the surface, and at this time we cannot sink any deeper, in consequence of the surface water. We have had very heavy falls of rain here, and as the shaft being in a quarry, which is a large open place at the surface, and it takes in a great quantity of water at the time when it is rainy; if the weather prove more favourable, we shall resume sinking again. Four men rising and stopping the back of the adit against the new shaft; here the lode is very large, and a small quantity of black ore in the gozzan. Within the last week we have cleared an old shaft in the western part of the mine, and got down to the old men's workings, about the shallow adit level; by searching I have found a very large fine lode of gozzan, in different places, and some small bunches of black ore, and so fine a white killas country as ever was seen by a miner here. I believe the old men had a good mine, and if the water had been out thirty fathom deeper, I believed we should find it to be a good mine now. I hope to bring some ore up at the surface this week, and in our next report we shall be able to send you some account of the quantity and quality that may be rose in one month.

T. TIPPETT.
CARN GREY MINING COMPANY.—*Ennis, Oct. 5, 1835.*—During the last week our shaft men have been engaged in casing and securing the engine shaft, &c. and are now cutting a plat, as soon as this is accomplished these men will commence sinking, and we shall put our pairs to drive the end west, and another to clear up and then drive east. The stamps are in a state of forwardness, and will begin to work in about 3 weeks. We have not worked upon the tin ground since my last, but shall put two men there in a day or two, and get a large pile of tin stuff ready by the time the stamps are completed. There is nothing new in the adit.

W. BROWNE.
ROCHE ROCK MINING COMPANY.—*Oct. 5, 1835.*—The winze from the 50 to the 60 fathom level, opposite the engine shaft, has been holed, and the men are set to drive east and west on the branches in the south lode, at the deep level. The lode at the 60 fathom being 13 feet wide, and the tin running in branches, we set two levels to drive east, and one west. From this time we shall be exploring the lodes, and from the appearance of the middle branch in the eastern end, we anticipate sending you very

shortly a pleasing report. The water has not yet been drained from the winze, in the 50 fathom level west of the engine shaft, but the extension of the 60 fathom level west will cut it down in the course of a month or six weeks. We have, also, commenced driving north from the engine shaft, to cut the north lode at the 60 fathom level. The ground is exceedingly favourable. We expect to cut it by the end of this week or beginning of the next. We are raising some very good work in the 20 fathom level east of the engine shaft, and from the appearance of the lode eastward, we shall extend our workings in this part of the mine. The tin we are now returning principally belongs to the adventurers, being broken on tutwork—this will increase as we have more men at work, on the course of the lodes, than we have had at any previous time.

BRITISH TIN MINING COMPANY.—*St. Austre, Oct. 5, 1835.*—The men in the engine shaft have only sunk 18 inches since I wrote last; the ground is very hard, and I have been compelled to increase the price, for the next fathom, to 18s. The indications are similar to last week's report (not inferior), the greens and tin rich. Osborn's end, in Osborn's shaft, I have let on tribute, at 12s. in the pound, the takers to pay for washing and spalling. I hope to let two more pitches in the course of the week, if not we shall stop the backs on owners' account. The engine goes 3½ strokes a minute, the water having increased.

BRITISH COPPER MINING COMPANY.—*Great Wheal Charlotte Mine, Oct. 7, 1835.*—Twelve of the 24 men (in the 32 fathoms level) are engaged on tut work, and 12 on tribute; 6 in raising from the back of each end. I see no alteration in the appearances of the mine worth mentioning, since my last report, nor can it be expected that any great change could take place in the course of the week, the lode being large and hard. We have set a new west shaft to sink from surface to adit, a depth of 30 fathoms, for £39.

ENGLISH MINING COMPANY.—*Great St. George, 6th October, 1835.*—On the reference to the Setting Report, you will find that the tribute of every pitch mentioned in my last letter, with the exception of two, has undergone a very gratifying reduction. In one of these two (John Williams) we have been sadly disappointed in the ore; the quality will be very near that mentioned in my last. In Gribben's pitch the men will be employed the greater part of the present month in putting in a very large and important "stall," otherwise the tribute would have been considerably lower. You will observe that four men have been added to this pitch, making in the whole eight. The tribute of James Cowling's pitch would have been less, had it not been for the impurity of the air, which prevents the men working full one quarter of their time; this, however, we propose remedying, by sinking a winze from the bottom of the 50, to meet the tributes from below, whom we have obligated to raise two fathoms in the course of the month. On Wednesday last a misfortune occurred at Devonshire, in the breaking of the main rod of the machine. Had it not snapped just as the engine was taking her stroke, the consequence might have been of the most serious cast. As it is, however, the principal disadvantage is that of the expense of a new piece of wet timber and the expense of labour, and in repairing the damage, which was effected by four o'clock on Sunday afternoon, and it is now going on well. The rod broke immediately at the extremity of the strapping plates, running from the nose of the bob; the many holes perforated for the reception of the bolts of which, appear to have weakened the timber, such weakness being still more increased by the admission of the water into the perforations. Having lost her load by the breaking of the rod, the steam acting violently upon the piston, brought her in so powerfully as to draw the catches full a foot through the large spring beams which pass from one end of the engine-house to the other; the bottom of the cylinders, however escaped uninjured.

ALBION COPPER MINING COMPANY.—*Oct. 6, 1835.*—We have not sunk Mithian engine shaft since our last report, as our sumpmen have been enlarging the pit work from the 30 to the 40 fathom level, and we commenced sinking the shaft this morning as usual. The lode in the 40 fathom level west from the engine shaft is 5 feet wide, poor. The lode in the 40 fathom level east from engine shaft is about 6 feet wide, with a branch of ore on the south part of the lode towards the bottom of the end, about 4 inches wide. The lode in the 30 fathom level east from engine shaft is 2 feet wide, with stones of ore. Wheal Liberty engine shaft is sunk under the 47 fathom level, 11 fathoms 2 feet. The lode in the shaft is 2 feet wide, ore throughout, but not rich. The lode in the 47 level west from engine shaft is 12 inches wide, kindly. The lode in the 47 west from engine shaft is 2 feet wide, poor. The lode in the 47 east from engine shaft on the caunter lode is 3 feet wide, producing 1½ ton per fathom, judging from present appearances we may expect this end to produce a large quantity of ore per fathom in future. The lode in the winze under the 47 east from engine shaft is 3 feet wide, producing about 2 tons per fathom, the water is quick for sinking. The lode in the 40 fathom level west from cross cut on the north lode is 15 inches wide, producing a large quantity of jack and stones of ore. The lode in the 40 fathom level east from engine shaft is 18 inches wide, producing stones of ore, and has a kindly appearance. The lode in the winze under this level is 18 inches wide, producing stones of ore. We holed the winze in the 40 fathom level west since our last report, and commenced driving the end. The lode at present is about 2 feet wide, producing large and good stones of ore.

PERRAN CONSOLIDATED MINING COMPANY.—*Oct. 5, 1835.*—We have communicated the new shaft with the adit, and expect to ascertain the underlay of the lodes, so as to fix our engine shaft, engine-house, and other necessary erections this week. The end on the north lode driving east is much the same as last week. We have set the adit level to drive west on this lode, and also a shaft to sink on the adit level going west on Anthony's lode, in addition to our other bargains. *JAMES GRIFE.*

NORTH CORNWALL MINING COMPANY.—*Oct. 3, 1835.*—This being our setting day, we have to inform you of the following bargains: *Wheal Thomas*—the 5 fathom level east, sett at 27s. per fathom, the lode is split in several parts so as not to allow of an exact definition of size. There is lead in all the branches, but the quality of the lode at large does not vary greatly from what has been said of it in preceding reports. The western end at same level, sett at 30s. per fathom, nearly the same appearance of the lode, both in size and quality, as last week. The engine shaft was set previous to this day, to sink from 4½ to 9 fathoms below the 8 fathom level, at £10 per fathom. The ground is rather harder with floors of spar occasionally. We have set a tribute pitch from the adit to the 8 fathoms level, extending from the old winze, (that lately holed) 5 fathoms east, at £3 10s. per ton, tributaries part; we hope to be able to set other pitches, both east and west, in a short time. The engine continues to do her work perfectly. *Wheal Hope*—adit end, sett at 55s. per fathom, we expect to hole to the east shaft in course of this month. The lode is larger than we have hitherto seen it, with some lead, but not worth saving. We are still impeded in our progress with the engine, owing to the delay at the foundry.

*JAMES GRAY, } Joint
JOHN BORLASE, } Managers.*
EAST CORNWALL MINING COMPANY.—*Oct. 5, 1835.*—I beg to inform you that we have two men working in the back of Wheal David adit, 30 fathoms west of Malachy's shaft, on a very promising lode 3 feet wide, 8 inches of which will produce 37 ounces of silver per ton of ore; and in another place in the back of the said level, we are raising silver by 2 men, on a lode 16 inches wide, 4 inches of which will produce 336 ounces of silver per ton; the remainder of the lode all saving work. The lode in the back of Wheal Mexico adit is about a foot big, 6 inches of which is very good for silver. The lode in the back of Wheal Virgin adit is much the same as in my last report. The lode in all the adit levels are of a similar nature as when I last addressed. We have advice of the small castings now being put on board a vessel at Hayle, and we are making every preparation for having them in the house on the arrival of the vessel.

J. MALACHY.
REDRUTH UNITED MINING ASSOCIATION.—*Oct. 5, 1835.*—The lode in the engine shaft is about 4 feet wide, with good bits of tin ore in it. In the 32 fathom level, east of the engine shaft, there is no alteration since the last report. In the 32 fathom level, west of the engine shaft, lode 4 feet wide, with good bits of copper ore. In the 22 fathom level, east of the engine shaft, lode 2½ feet wide, with a small quantity of tin ore. In the 12 fathom level, east of the engine shaft, lode 3 feet wide, with a small quantity of tin ores. In the 12 fathom level, west of the engine shaft, the lode has much the same appearance as reported last. Gooding's shaft is holed to the adit level; the men belonging to this shaft and the adit level east are employed in opening ground for a plat at the adit level, to lodge the stuff that may be broken in the adit level and shaft. In the adit level west of Lemm's shaft, lode continues large, and has much the same appearance as we stated in our last report. The west shaft, 28 fathoms deep. At Buckett's, Ashton's shaft, 26 fathoms deep. The adit in towards Ashton's shaft 33 fathoms. The walls of the boiler house are completed. We have cleared Clijah adit as far as we think necessary at present.

R. GOLDSWORTHY.

REDMOOR CONSOLIDATED MINING COMPANY.—*Callington, Oct. 4, 1835.*—In extending the 10 fathom level north of Johnson's shaft, we have communicated it with some ancient workings filled with rubbish and water, which broke away, and choked the level to such an extent, that the men have been employed in clearing it since my last report, consequently I am unable to state to you the appearances of the lode there. This unexpected excavation of the ancients, so much below the adit level, increases my confidence of success in this part of the mines. We are extending the 20 fathom level from this shaft towards the lead lode as fast as possible, but the ground is at present hard. At Wilkinson's shaft we are proceeding with the necessary operations alluded to in my last, preparatory to sinking below the 10 fathom level. The adit driving north of the north whim shaft, on the cross course, is continuing in very favourable ground. Owing to an increase of water, we are obliged to suspend the extension of the shallow level towards the old silver workings. *W. PETHERICK.*

EAST WHEAL STRAWBERRY MINING COMPANY.—*Oct. 5, 1835.*—Until after the workings of the steam engine, my information respecting the subterranean parts of this mine will of course be limited, and I will therefore thank you to excuse the brevity of this report. I have to observe, that we are continuing the sinking of Grou's engine, and whim shaft; the former is about 14½, and the latter 12½ fathoms below the adit, notwithstanding the increase of water. The adit has been extended about 4 feet into the caples of the Great Stopes Lode, which continues hard. We are getting forward with the erection of the steam engine, &c. as fast as the materials for the same are supplied. *W. PETHERICK.*

POLBREEN MINING COMPANY.—*Oct. 3, 1835.*—In reporting to you this week, I beg to state we have no alteration in the ground, either in our shafts or levels, since my last of the 26th ult., and can only add, in reference to the bottoms, that in breaking the lode this week, we find it continues large from 4 to 5 feet wide, producing excellent rocks of ore, and has every appearance of improving. Our computed 32 tons of ore was sold on Thursday for 71. 13s. per ton. All our surface work is going on (as usual) with all possible speed. *R. ROWE, JUN.*

NEW SOUTH HOOE MINING COMPANY.—*Taivstock, Oct. 1, 1835.*—I have deferred forwarding a report of the prospect of the New South Hooe Mine, until I could announce to you the discovery of the South Hooe lead and silver lode. Search after it has been attended with success sooner than I expected, and it has been laid open in two places in the hill, at a higher level than the shaft, about 60 fathoms to the west, and also in the western boundary of the river, where we have commenced driving an adit upon its course, which will be 30 fathoms deep where it intersects the lode. The lode presents just the same appearance at the surface as it presented when it was first discovered in the Old South Hooe Mine, on the other side of the Tamar, being small, with an inclination of about 14 foot in the fathom, intermixed with spar and spots of lead. Upon the whole, there is reason to expect, that by the time the adit shall have explored it for a distance of 10 or 12 fathoms, I shall have the pleasure of reporting its having much improved in quality. As to the shaft, it has been thought necessary to discontinue sinking it for the wet season, having just grounds to fear that the water might so increase, as not only to prevent our sinking the shaft, but also that it might in some measure prove troublesome to us in driving west of the shaft, the shallow and 10 fathom levels, which it is now (since the discovery of the South Hooe lode to the west) particularly desirable to drive with all possible speed. In the former level the lode is kindly, about a foot big, very regular, producing in places spots of lead and mundie. This level will, in the course of two months, form a junction with the South Hooe lode, 14 or 15 fathoms deep, at the point B, where it may reasonably be expected the two lodes will prove productive. In the 10 fathom level, the lode is in character just the same as described in the level above. Both these levels promise to improve; shortly, the adit commenced at the point A. will be nearer to the east and west lode, and become available to us sooner than the old one, and in every respect answer our purpose better; it will cut the east and west lode at a greater depth, and have the advantage of being driven for that whole distance upon the course of the South Hooe lode, as will be seen by the rough sketch I have drawn out. *J. H. HITCHINS.*

TIN MINES IN FRANCE.

Tin was not known to exist in any part of France till the year 1809, when it was discovered not far from Limoges, in the department of Haute Vienne, and in the year 1817 it was accidentally found in the south of Brittany, not far from the mouth of the river Loire. A marine officer, who had long been detained as a prisoner of war in England, and had been quartered in Cornwall, in the neighbourhood of the tin mines, returned to his native town of Piriac, a small sea port of the department of the Lower Loire. Going out sea-fishing one day, and wanting some weights for his lines, he picked up a pebble on the shore, which appearing to him unusually heavy, he took it home to compare with a piece of Cornish stream tin which he had brought from the place of his captivity, and found it to be the same substance. He gave notice of his discovery in the proper quarter, and M. Duffrenoy, now a distinguished French geologist, then a young aspirant of the school of mines, was sent with another to investigate the matter, and the report they made shows a remarkable uniformity of structure between that part of Brittany and the tin district of Cornwall, on the opposite side of the channel. The country between the mouth of the Loire and Piriac is composed of granite and slate, and it is at the junction of these rocks that the tin ore is chiefly found. They met with veins traversing the rocks, and a considerable quantity of stream tin, both in the form of pebbles and of sand; and their impression was, that this stream tin was produced by the wearing of the rocks containing the veins, by the action of the waves, the same action going on now, as in Cornwall in remote ages. The continued large importations of tin from England into France shows that this discovery has not as yet been attended with any great results.

NORTH CAROLINA GOLD MINES.

From a Correspondent.

Many of the inhabitants at Concord have pieces of pure gold of various weight, one of which weighs 28lbs. The beds where the gold is discovered are of gravel, and very extensive, covered with water in the winter months, but dry in summer. These beds are principally quartz, with slate, schist, and some imperfectly formed granite; the sand is mingled with mica, they rest on a bed of black or blueish argillaceous earth. They are from 30 to 100 feet wide, and wind round the hills, which rise in all forms in angles of from 20 to 60 degrees, and about 100 feet high. These hills are gravel, mixed with quartz, some of it remarkably white, some red, and yellow. The grounds are covered with all the common forest trees of the more northern states, and about one fifteenth of pine, and the forests abound with beautiful sour wood. The inhabitants particularly healthy. Cotton, corn, wheat, rye, &c. flourish here; and peach and other fruit trees are so common, that hedges, in some places, are formed of them. The manner of searching for gold is, to take shovels and turn over the gravel, always advancing, as it is turned back, and picking up what is discoverable to the eye, by which thousands of small grains are lost, the fingers cannot separate them from the sand. By working this over again with quicksilver, large quantities may be obtained; no machinery is required, or smelting process. The first mine was found by a son of Mr. Reed, who, in watering his horse at the creek, discovered a piece of gold, quite pure. Two years after Mr. Reed, with two partners, pursued the search for gold, with six black boys, during the short period of only six weeks. In each of the two first years they obtained 17,000 dollars, besides what was stolen from the streams, supposed to be half as much more. No attempt has been made to open the hills; they are totally unacquainted with the subject of mining.

Elias Boudinot, Esq., the director of the mint, made a report to the President, dated January 1, 1805, of which this is an extract:—"About 11,000 dollars of the gold coin is the produce of virgin gold, found in the county of Cabarras, in the State of North Carolina. It is to be regretted that this gold is melted into small ingots, for the convenience only of carriage to the mint, by which, there is reason to believe, a considerable proportion of it is wasted; and it is also said, that the finest particles are neglected, and only the large grains and lumps brought after." Messrs. Morton and Bedford, of Baltimore, purchased a small tract of about 300 acres, joining the lower end of Reed's purchase and mine, they gave seven dollars an acre. Governor Mercer stated that they had analysed the sand and gravel, and found it worth a guinea a bushel, after the lump gold was picked out. The gold as found is worth 19 dollars an ounce, while the best East Indian and African gold dust is not worth more than from 12 to 16 dollars. It has been thought by the historians of nature, that volcanoes have great agency in the productions of metals, and more mines found thereabouts than elsewhere. South America abounds in volcanoes; no country in the world has produced more of the

precious metals. Traces of ancient volcanoes may be seen for at least 100 miles in length, in North Carolina, and not far from the mines of gold; and what is very remarkable, the latitude of these mines is precisely the same as some of the gold mines of Santa Fe, as well as those of Japan, said to be the richest in the world.

Extract of a letter from Dr. William Thornton:—"Mr. Thomas Moore got some bicory-nuts, and in looking for a stone to break the shell, he went to a tree that had been blown down, and picking up the first stone he found in the fresh turned up earth, finding it heavy he washed it, and found it was a piece of solid gold, which he sold for 450 dollars! He then set some men to work, and they made from two to five dollars a-day each, in grounds opposite to mine. Some of it has been sent to the mint of the United States, where they exchange it for eagles ready coined, weight for weight; but the gold-brainers give a still better price, say four per cent., it is so pure and malleable."

ON RAILWAYS.

The Liverpool and Manchester Railway was the first work of this kind opened for purposes of general traffic, and the principles upon which it was constructed were, therefore, new, and generally speaking, purely theoretical. Much experience has been gained by the operations on this line of road, and, perhaps, none of more importance than that which relates to the working of the locomotive engine upon planes of different degrees of inclination. The result of that experience seems to have established that any rise not exceeding 1 in 1,000, which is about 5 feet per mile, may be considered level in relation to the operations of the locomotive engine with a load, while upon greater degrees of inclination the power of the engine, with any given weight, in the following ratio, assuming the power to draw that weight on a level at unity.

Level.	The power required will be.
1 in 660 or 8 feet per mile	1.37
1 — 528 — 10	1.47
1 — 480 — 11	1.52
1 — 440 — 12	1.56
1 — 352 — 15	1.71
1 — 330 — 16	1.76
1 — 264 — 20	1.95
1 — 250 — 21½	2

Or supposing the engine to exert the same power throughout, the weight it carries will be diminished in the same proportion. It hence becomes evident that, in economizing both time and cost of transit, assistant power is in all cases advisable upon gradients of 21 feet per mile, and upwards, and this has led to a principle in the formation of railways which seems to be daily gaining ground among the best practical engineers, namely, that of overcoming all necessary summits quickly. This system effects a great economy of power, because it enables the engineer to arrange the greatest possible portion of his line in practically level gradients, upon which the engines can be worked at their full power up to the foot of the acclivity, and this being sharp and steep the assistant power required is reduced to the minimum amount of time.

This is information which the public, who are the supporters of these undertakings, but who too frequently have not the opportunity of judging of the working merits of any particular project, ought to be in possession of, it will not, therefore, be deemed irrelevant to subjoin the character of gradients upon some of the railways now on the tapis, and we shall take a future opportunity of adding to the list here given.

The London and Birmingham line has 27 miles level, or equivalent to level; 20½ miles not rising more than 10 feet per mile, and 62½ miles rising from 10 to 18 feet per mile; this, it will be observed, runs through a portion of the country very unfavourable to the attainment of good levels. The Southampton line has 20½ miles level, or equivalent to level; 13 miles rising about 10 feet per mile, and 31½ rising from 20 to 50 feet per mile. The great northern line to Norwich and to York, proposed by Mr. Gibbs, has 296 miles level, or equivalent to level; and 16½ miles rising from 20 to 50 feet per mile. Mr. Walker's line for the same purpose, called the Northern and Eastern line, has 112 miles level, or equivalent to level; 74½ miles not more than 10 feet per mile, and 73½ miles rising 16 feet per mile. The Brighton line, as proposed by Mr. Stephenson, has 15 miles practically level, 3½ miles rising 10 feet per mile, and 33 miles rising 16 feet per mile. Mr. Gibbs' Brighton line, including the Croydon portion, which is now in progress, has 46½ miles practically level, and 10 miles rising about 50 feet per mile.

FOSSIL Equiseta.

A portion of the sea shore between Carrickfergus and Kilroot Point exhibits a singular appearance. At the place alluded to, a little above high water mark of ordinary tides, the beach is thickly studded with what at first sight appear to be iron spikes, (for they resemble rusted iron), standing in an upright position, from two to six inches high, and varying from one to less than half an inch in circumference. In attempting to pull them up, they break off a little below the surface, and on examination prove to be hollow, as if bored quite through. It is difficult to ascertain how far they descend into the ground, but on the face of the bank adjoining, they may be traced two feet and more in length; and being friable and brittle when damp, it is difficult to remove them entire more than a foot in length. After high tide the appearance is more remarkable, as they have obtained so much consistency as to be able in some degree to resist the action of the water, whilst the surrounding substance is washed away, and the tubes are then exposed standing upright. The presence of iron is strongly indicated in the appearance of the adjoining bank. In places where they have been broken off level with the surface, and nothing but the hole in the tube is seen, the observer would conclude it to be the work of some worm or insect. But in all those that were examined, there was no appearance of any thing of the kind; and the general appearance altogether inclines one to think that the cavities in the tubes were formed by a plant which had become incrustated with sand impregnated with iron. Though the plant itself has disappeared, or become so identified with, as not to be clearly distinguishable from the substance with which it is incrustated, yet the form has been preserved, and the different sizes of the holes might be supposed to correspond with the dimensions of the pipes of some fistulous plants. The place where the tubes are found has evidently been occupied by an equisetum. The plants in the immediate vicinity now growing are equisetum fluviatile, limosum, palustre, triticeum junceum, and polygonum amphibium. The tubes above ground are all erect, and those in the face of the bank descend perpendicularly—none are seen in a horizontal position.—*Dublin Geological Journal.*

GLOSSARY OF TERMS MOST FREQUENTLY EMPLOYED IN MINING.—Continued.

Administrador.....Superintendent.
Almadaneta.....A stamp head.
Alto.....The upper part.
Arastre.....Mill for grinding ores, employed in the process of amalgamation of silver ores and of gold.
Arroba.....25 lbs. Spanish weight.
Bar master.....An officer who superintends the lead mines.
Bar mote.....A hall or court in which trials relative to lead mines are held.
Batch of ores.....Certain quantity of ore sent to the surface by any pair of men.
Bata.....A bowl used in rewashing.
Beneficio.....Making the metallic contents of the ore available by reduction.
Blast.....The air introduced into a furnace.
Board.....An adit is driven board when it runs in a transverse direction to the grain or face of the coal.
Bob.....The engine beam.
Boca.....Mouth, entrance, or pit of a mine; first opening made in the vein.
Bounds.....The proprietary of tin ore over a given tract.
Breast.....The face of the (coal) workings.
Buddle.....A frame made of wood, and filled with water, in which the lead ore is washed.
Burning house.....The furnace in which tin ores are calcined to sublime the sulphur from pyrites; the latter being thus decomposed, are more readily removed by washing.
Burro.....A hand wheel; a windlass.
Burrow.....A heap of deads, attle, rubbish.
Butty.....In collieries, a person who contracts to raise coal by weight or measure.

CampistasTributers.

Cata.....A mine of no great depth, a pit made in quest of the vein, a mine denounced for trial.
Clavos.....Masses of native metal, bunches or masses of ore; nails.
Cobre.....Copper.
Contrachelo.....A rise or working upwards.
Cleet.....A wedge.
Cope.....To agree to get lead ore at a fixed sum per dish or load, or other measure.
Creep.....The weight of the incumbent strata, after the coal has been partially worked out.
Casing.....A division of wood planks, separating a foot way, or a whim, or engine shaft, from one another.
Cathead.....A smaller capstan.
Clack.....The valve of a pump of any description.
Claying.....Lining the hole (in which gunpowder is to be placed) with clay, to prevent the powder becoming damp.
Collar of a shaft.....The timber by which its upper parts are kept from falling together.
Costeaning.....Discovering lodes by sinking pits in their vicinity, and driving transversely to their supposed direction.
Crop.....The best ore.
Dau.....A square frame of wood, to draw coals from the work to the main roads under ground.
Deads.....Cuttings of stone of no use—attle, or rubbish.
Desagüe.....Drainage.
Dish.....That portion of the produce of a mine which is paid to the land-owner or lord.
Draft engine.....An engine used for pumping.
Dropper.....A branch when it leaves the lode.
Estano.....Tin.
Engine shaft.....The pit or shaft by which the water is drawn by the engine from the lower parts of the mine, to the adit or surface.
End.....An adit is said to be driven end when it is in a line with the grain of the coal.
Face.....The face of the coal is at right angles with the grain.
Fuze.....Straws or hollow briars, reeds, &c. filled with powder.
Feeder.....A branch when it falls into the lode.
Flang.....A two-pointed pick.
Flat rods.....Rods for communicating motion from the engine horizontally.
Footwall.....Is the wall under the lode; it is sometimes also called the underlaying wall.
Fork....."Water in fork," water all drawn out; the bottom of the engine shaft.
Galera.....A large shed, a mill-house, or grinding mill; a large building on the floor of which the treading in of the quicksilver in amalgamation takes place.
Gad.....A pointed wedge of a peculiar form having its sides of a parabolic figure.
Gin.....The machine by which the coal or ore is raised from the mine.
Ground.....The country; the stratum in which the lode is found.
Hade.....The underlay, or inclination of the vein.
Horn.....A line running horn is at an angle of 45 deg. with the face of the coal.
Hechado.....Dip of the lode.
Herramienta.....Tools; taken figuratively it implies a borer and hammerman.
Hanging wall.....The wall or side over the lode.
Horse.....The dead ground included between two branches of a lode, at the point of their separation.
Hutch.....Cistern or box.
Jumper.....A long borer, worked by one person.
Keeve.....A large vat.
Labr.....A work from which ores are extracted; in general, all work of the mine, and especially the front work.
Loobs.....Slime containing ore.
Loading pick.....A pick made purposely to cleave or rive up coals, and prepare them for laying on the corves.
Maciza.....A solid untouched part of the vein.
Marco.....8 ounces, or lb. Spanish, equal to 3552 grains English.
Minero.....A miner, an underground agent.
Molino and Mortar.....Stamping mill.
Needle or Nail.....A long taper piece of copper or iron with a copper point used when stamping the hole for blasting, to make by its withdrawal an aperture for the insertion of the rush or train.
Noys.....Square pieces of wood, which are piled on each other to support the roof of a coal mine.
Ojo.....Bunch or small spot of ore in a lode.
Owne's account men.....Workmen paid at so much per day.
Pepena.....Picked ore of the best quality; rich ore.
Pillar.....A support for the roof, of timber, stone, or other material.
Post.....A pillar of coal or other strata left.
Punch.....A piece of timber used as a support for the roof.
Pitman.....One employed to look after the lifts of pumps, and the drainage.
Purser.....The cashier or paymaster at the mines.
Raya.....Weekly account of the mine expenses.
Rack.....An inclined frame on which the ores and slime are washed and separated.
Ratchell.....Loose stones.
Shift.....The time a miner works for one day.
Seacolon.....An adit or water level driven from the earth's surface either on the course of a lode, or to intersect it.
Seraper.....A piece of iron used to take out the pulverized matter which remains in the hole when bored previously to the blasting.
Shouading.....Tracing round stones from the vale to the lode whence they were torn by the deluge, or by some convulsion of nature.
Slimes.....Mud containing metallic ores; mud or earthy particles mixed with the ore.
Stamp head.....The iron weight or head connected with the stamps.
Stem.....A day's work.
Tiro.....A shaft.
Ton.....The ton varies in different districts: the common ton is 20 cwt. of 112 lb. or 2,240 lb. In Cornwall, the mining ton is 21 cwt. of 112 lb. or 2,352 lb. Tin is sold in Cornwall by the 1000 lb. and not by the ton.
Tossing or Tozing.....A process consisting in suspending the ores by violent agitation in water, their subsidence being accelerated by packing, the lighter and worthless matter remain uppermost.
Tribute.....Proportion of the ore which the workman (tributer) has for his labour.
Tugs.....Hoops of iron fastened on the corves to which the tacklers are affixed.
Tying.....Washing.
Veta madre.....The mother or principal vein.
Van.....To wash and cleanse a small portion of ore on a shovel.
Vugh or vogle.....A cavity.
Whim shaft.....The shaft by which the stuff is drawn out of the mine by horse or steam whim.

The terms in Italic are Spanish.

STANNARY COURTS.

Extracted from the West Briton.

TO EDMUND TURNER, ESQ.

SIR,—Three weeks have elapsed since the publication of a letter addressed by Mr. Hill to the Earl of Falmouth, on the present state of the Stannary Courts; and during that period I have anxiously hoped that the subject would be noticed by some one whose station might give weight to his remarks. I have, however, been disappointed; and I therefore take the liberty of publicly calling upon you to step forward, and to aid the mining interests at this crisis. It is utterly impossible that the county can look for efficient reform in the stannaries from parties to whom the very sound of reformation is offensive; permit me therefore to say, that the mining interests must leave this business in the hands of the opposers of the Reform and Municipal Corporation Bills; and, under this conviction, I venture to call upon you, because I believe you to be capable of taking a decisive and honest part in any cause which may involve the interests of your countrymen, and require to be prosecuted on the principles of reform. If the county desire justice at the hands of a constitutional court,

the formation of that court must be based under the superintendence of reformers. It is not my present object to make those remarks upon Mr. Hill's pamphlet which he challenges by its publication. No one can doubt that which he has laboured to prove, viz.: the antiquity of the stannaries—no one will dispute that necessity demands a local jurisdiction applicable to all minerals. To prove the one or the other, it was not necessary to quote a petition from Pearce's musty book, or to call in the aid of Spanish commentators or German codes. Neither will Cornishmen be convinced by any such foreign assistance, that the judge of the mining court of Cornwall, whenever it shall be established, ought not to be appointed on constitutional principles; although it is quite clear that Mr. Hill is of that opinion. Addressing you, as I now do, merely for the purpose of soliciting your attention to the subject, it is not necessary fully to discuss the nature of the Stannary Courts; I shall therefore conclude, by remarking upon some striking and evident bearings of Mr. Hill's little selection. It is quite evident that Mr. Hill desires to burthen the county with a court of equity, and to substitute for the ancient and constitutional Stannary Court of mixed jurisdiction, in which trial by jury is so essential a part, an arbitrary and expensive tribunal, over which some local gentleman, probably having conflicting interests with those of his suitors, shall preside. This attempt might have succeeded during the borough system; but it will fail now. The petition copied from Pearce's book is relied upon as a very important document in regard to the stannaries; and Mr. Hill uses it to prove facts never disputed—namely, the antiquity and importance of the Stannary Courts. But it is unfortunate, if indeed he required any authority to prove that which is universally admitted, that he should have selected a document which, in the time of James the First, asserts, that the tanners are, "in number and degree, the least and meanest part of us, and for the most part are foreigners, and hired to work in our tin works for day wages." The petition putting forth this impudent assertion, I regard as waste paper. Mr. Hill relies on it as a solemn authority; and particularly on the above words, which, in his little compilation, are therefore printed in italics. Now, Sir, in my opinion, the "Working Tanners" are now, as they were then, the strength of your county; and I am of opinion that the mining court should be constituted so as to protect the "Working Tanners," equally with adventurers, merchants, smelters, and lords of the soil; and more especially must it guard the mining interests to this extent:—that whilst it holds parties amenable to its jurisdiction, care must be taken that it do not give power to those who may reside out of the jurisdiction of the court, to take advantage of it as plaintiffs, and to escape from it as defendants. In the early part of 1834 I prepared a petition to parliament, and the outline of a proposed act of parliament, for consideration in respect of a mining court, which was approved by several gentlemen in this county, and which I discussed with an eminent professional gentleman of Truro, who will, I trust, still aid in reforming the Stannary Courts; but I did not press these measures on the county, because I was assured, by Sir George Harrison, and the late Mr. Lowdham, the solicitor of the Duchy, that the officers of the Duchy were about to bring forward a measure to meet the object which I had in view, viz., the establishment of a pure and effective court, applicable to all minerals. However, having waited upwards of twelve months, I participated in the disgust and surprise of the county at the weak attempt which was made to place upon them a miserable enactment for legalising the corrupt practice of the Vice-Warden's Court. My papers are at your service on behalf of the mining interests; and I trust that whilst, on the one hand, you may be induced to stand forward and take the lead in this matter, you will, on the other, agree with me, that although in so doing it will be necessary to expose the jobbing of the Tory officers of the Duchy, yet it will be quite consistent with the principles of reform, to hold sacred the rights of our King in regard to his Duchy of Cornwall.

Truro, Sept. 22, 1835.

I am, Sir, your obedient Servant,
 GEORGE CONCANEN.

MISCELLANEA.

Antiquity of Mines.—It appears, according to the records of the Exchequer, that the Combmartin Mines were first opened in the year 1293, by William de Wymondham, through whose mineral skill 370lbs. of fine silver were refined the first year, (which King Edw. I. gave as a marriage portion with his daughter Eleanor to the Count de Barre); in the following year, 521lbs.; and 700lbs. in the third year, were refined and sent to the Mint. The historian further states, that the mines were worked by experienced miners from the Peak of Derbyshire and Wales; as to the benefit obtained we are at a loss to determine; but it is supposed to be very great in the reign of Henry V. In the reign of Edward III. immense treasures were obtained from these mines, by which he was enabled to accomplish his French conquest. Queen Elizabeth directed the mines to be opened by Adrian Gilbert, Esq.; they were afterwards carried on under the superintendence of Sir Bevis Bulmer, Knt., through whose management and mineral skill a great quantity of silver was landed and refined; out of which a very splendid cup was presented to Sir Richard Martin, Knt., lord mayor of London, weighing 137 oz. fine, with an appropriate inscription, now legible, and may be seen at the Mansion House, London. The mines have been opened three times since that period.

Isthmus of Darien.—The government of New Granada has issued a decree, granting to the Baron de Thierry, a celebrated French engineer, permission to dig a canal across the Isthmus of Darien. The government allows him the exclusive privilege of receiving tonnage and other dues, for a stated period, on all vessels which may navigate the canal, besides placing many facilities in his way for the completion of this gigantic undertaking.—*Bath Guardian.*

Gold in Canada.—Native gold has been picked up about thirty miles to the southward of Quebec. It was met with in a small stream running into the Chaudiere, and over a region, as I suspect, of talose slate. A similar specimen was found in the same neighbourhood several years ago. That in question is of a flat ovate form, weighs 10.63 grains, and has a specific gravity of 19.7. The geological associations of this ore appear to be analogous to those of the Russian and American localities. It is worthy of notice that in the neighbourhood of the place where the gold was found two or three Canadian peasants have been mining for several years past. After the year 1825 I visited the scene of their operations, and found a shaft, ten feet cube, sunk in talose slate, the predominating rocks at hand being of serpentine. I have lately been informed that the depth of this shaft is now upwards of fifty feet. At the period of my visit silver was said to be the object of search, and presuming that they had mistaken the deceptive lustre of the silvery tale for that of this metal, I endeavoured to dissuade them from so ruinous a pursuit. Nothing has yet transpired as to their success, which is generally considered not to have been encouraging; and yet it is scarcely conceivable, that they would persevere through so many years, without being stimulated to do so by some substantial return, a consideration which, joined to what is stated above, renders it not improbable that they have met with some small deposits of gold.—*Siltman's American Journal of Science.*

Destructive Earthquake.—Letters from Caesarea have brought the melancholy intelligence of the total destruction of one fourth of that city by an earthquake. Upwards of 500 persons have perished under the ruins. The monastery of St. John, the church of St. Basil, and most of the stone edifices in the town have been overthrown. Ten villages in the immediate vicinity have been destroyed by the same cause. One of these, Toghandjee Keuji, has completely disappeared.—*Times.*

A Jonathan Outdone.—In Kilburne's "Survey of Kent," there is a marvellous story related of a monstrous fish having shot himself ashore on a little sand, now called *Fish-ness*, where he died next day for want of water, before which time his roaring was heard above a mile. His length was 22 yards, the nether jaw opening 12 feet; one of his eyes was more than a cart and 6 horses could draw; a man stood upright in the place from whence his eye was taken; the thickness from his back to the top of his belly, which lay upward, was 14 feet; his tail of the same breadth; the distance between his eyes was 12 feet; three men stood upright in his mouth; some of his ribs were 16 feet long; his tongue was 15 feet long; his liver was two cart loads, and a man might creep into his nostrils.—*Tib.*

Northern Ireland	10	Absent	Wain and Allyn	10
Pearse	17	Tenant		16
Perkins				

PRICES OF ENGLISH PUBLIC FUNDS.

	Satur.	Mon.	Tues.	Wed.	Thurs.	Frid.
BANK STOCK, 5 per Cent.	shut	shut	shut	shut	shut	shut
3 per Cent. Red. Ann.	shut	shut	shut	shut	shut	shut
3 per Cent. Consols.	99 1/2	99 1/2	99 1/2	99 1/2	99 1/2	99 1/2
3 per Cent. Ann.	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2
3 1/2 per Cent. Red. Ann.	99 1/2	99 1/2	99 1/2	99 1/2	99 1/2	99 1/2
New 3 1/2 per Cent. Ann.	99 1/2	99 1/2	99 1/2	99 1/2	99 1/2	99 1/2
New 5 per Cent.	shut	shut	shut	shut	shut	shut
Long Ann.	shut	shut	shut	shut	shut	shut
Ann. for 30 Years.	shut	shut	shut	shut	shut	shut
Ditto.	shut	shut	shut	shut	shut	shut
India Stock, 10 1/2 per Cent.	32 1/2	32 1/2	32 1/2	32 1/2	32 1/2	32 1/2
South Sea Stock, 3 1/2 per Cent.	25 1/2	25 1/2	25 1/2	25 1/2	25 1/2	25 1/2
Ditto Old Ann. 3 per Cent.	shut	shut	shut	shut	shut	shut
Ditto New Ann. 3 per Cent.	shut	shut	shut	shut	shut	shut
3 per Cent. Ann.	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2
India Bonds, 2 1/2 per Cent.	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Exchequer Bills, 14d. £1000.	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2
Ditto.	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2
Ditto.	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2
Ditto.	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2
3 per Cent. Cons. for Acc.	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2
India Stock Om. for Acc.	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2

TRANSFER BOOKS.

	Shut.	Open.	Shut.	Open.
Bank Stock, 5 per Cent.	shut	open	shut	open
3 per Cent. Red. Ann.	shut	open	shut	open
3 per Cent. Consols.	shut	open	shut	open
3 per Cent. Ann.	shut	open	shut	open
3 1/2 per Cent. Red. Ann.	shut	open	shut	open
New 3 1/2 per Cent. Ann.	shut	open	shut	open
New 5 per Cent.	shut	open	shut	open
Long Ann.	shut	open	shut	open
Ann. for 30 Years.	shut	open	shut	open
Ditto.	shut	open	shut	open
India Stock, 10 1/2 per Cent.	shut	open	shut	open
South Sea Stock, 3 1/2 per Cent.	shut	open	shut	open
Ditto Old Ann. 3 per Cent.	shut	open	shut	open
Ditto New Ann. 3 per Cent.	shut	open	shut	open
3 per Cent. Ann.	shut	open	shut	open
India Bonds, 2 1/2 per Cent.	shut	open	shut	open
Exchequer Bills, 14d. £1000.	shut	open	shut	open
Ditto.	shut	open	shut	open
Ditto.	shut	open	shut	open
Ditto.	shut	open	shut	open
3 per Cent. Cons. for Acc.	shut	open	shut	open
India Stock Om. for Acc.	shut	open	shut	open

DIVIDENDS.

The following dividends in the public funds become due this day:—Bank eight per cent.; three per cent. reduced; three and a half per cent. 1818; three pounds ten reduced; long annuities to 1869; ditto, 33 years to 10th October, 1859; four per cent. 1820; and three per cent. old annuities. The amount of the dividends is about five millions. If life annuities be transferred between January 1 and April 4th, or between January 5th and October 9th, dividends fall due on January 5th and July 5th; if between April 5th and July 4th, or October 10th and January 4th, dividends due April 5th and October 10th.

WEST INDIA COMPENSATION LOAN. For £15,000,000. Contracted for on Monday, August 3, 1835, by Mr. N. M. Rothschild, £75, 3 per cent. consols; £25, 3 per cent. reduced; and 13s. 7d. long annuities, for every £100 sterling subscribed. Interest on the reduced and long annuities to commence from April, 1835; and on the Consols from July, 1835. Discount at the rate of 2 per cent.

Deposit August 6, 1835, £10 per cent.	8th Payment, April 12, 1836, £9 per cent.
2d Payment, Oct. 15, ..	9th .. May 10, ..
3d .. Nov. 13, ..	10th .. June 14, ..
4th .. Dec. 11, ..	11th .. July 12, ..
5th .. Jan. 13, 1836, ..	12th .. Aug. 16, ..
6th .. Feb. 11, ..	13th .. Sept. 13, ..
7th .. Mar. 11, ..	14th .. Oct. 11, ..

Capital at the Bank on which the Payments are made:—	£750 Consols, £600 Money. Deposit, £650 10 0	Remaining payments, £590 10 0
250 Reduced 225 ..	22 10 0	302 10 0
£6 15 10/40 an. 210 ..	11 0 0	99 0 0
£1000 ..	£100 0 0	£900 0 0

IRISH FUNDS, 6th October, 1835.

	Bank Stock, 5 per Cent.	Royal Canal Stock, 3 1/2 per Cent.
Government Debentures 3 1/2 per Cent.	101 1/2	101 1/2
Ditto New, 3 1/2 per Cent.	101 1/2	101 1/2
Ditto Old, 3 1/2 per Cent.	101 1/2	101 1/2
Ditto, reduced, 4 per Cent.	101 1/2	101 1/2
Consols, 3 per Cent.	101 1/2	101 1/2
City Debentures, 4 per Cent.	101 1/2	101 1/2
Exchequer Bills, 3d per pie, 10 p ..	101 1/2	101 1/2

FRENCH FUNDS

	Oct. 1.	Oct. 2.	Oct. 3.	Oct. 4.	Oct. 5.	Oct. 6.	Oct. 7.	LONDON, Oct. 5.
5 per Cent. Ann.	100f. 25c.	100f. 25c.	100f. 25c.	100f. 25c.	100f. 25c.	100f. 25c.	100f. 25c.	100f. 25c.
Ex. on Lond. 1 sh. 25f. 35c.	25f. 35c.	25f. 35c.	25f. 35c.	25f. 35c.	25f. 35c.	25f. 35c.	25f. 35c.	25f. 35c.
Ditto 3 mths. 25f. 35c.	25f. 35c.	25f. 35c.	25f. 35c.	25f. 35c.	25f. 35c.	25f. 35c.	25f. 35c.	25f. 35c.
4 1/2 per Cent. Ann.	101f. 50c.	101f. 50c.	101f. 50c.	101f. 50c.	101f. 50c.	101f. 50c.	101f. 50c.	101f. 50c.
Exchange.	99f.	99f. 60c.	99f.	99f. 60c.	99f. 60c.	99f. 60c.	99f. 60c.	99f. 60c.
4 per Cent. Ann.	99f.	99f. 60c.	99f.	99f. 60c.	99f. 60c.	99f. 60c.	99f. 60c.	99f. 60c.
Exchange.	91f. 25c.	91f. 40c.	91f. 60c.	91f. 60c.	91f. 65c.	91f. 85c.	91f. 85c.	25f. 60c.
Bank Shares.	210f.	210f.	210f.	210f.	210f.	210f.	210f.	210f.

PRICES OF FOREIGN STOCKS.

	Satur.	Mon.	Tues.	Wed.	Thurs.	Frid.
Austrian, 5 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Belgian, 5 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Brazilian, 5 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Ditto, 1829.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Buenos Ayres, 6 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Cuba, 6 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Chilian, 6 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Columbian, 6 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Ditto, 1824.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Danish, 3 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Dutch, 2 1/2 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Greek, 5 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Ditto, 1825, 5 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Mexican, 5 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Ditto, deferred, 5 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Ditto, def. 6 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Neapolitan, 5 per Cent. 1824	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Peruvian, 6 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Portuguese, 5 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Ditto, New, do.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Ditto, 3 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Russian, 4 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Russian, 1822, 5 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Ditto, 1823, 5 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Ditto, 1824, 5 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Ditto, passive,	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Ditto, deferred,	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Dutch, 2 1/2 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Ditto, 5 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Neapolitan, 5 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2
Spanish, 5 per Cent.	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2

AMERICAN FUNDS.

	Redeemable.	London.	Amer Sep. 8.	Redeemable.	London.	Amer Aug 7
New York	6 1837	96	103	Mississippi 6 1841, 50.....		
	.. 1845	110	123	Do. New 6 1861, 71.....	110	
	5 1837			Alabama..... 5 1852		
	.. 1845	102	112	.. 1863	96½	
	.. 1846, 7			Indiana..... 5 1860	96½	
	.. 1850			Illinois..... 6 1850		
Pennsylvania	.. 1850		103	New Jersey Can. & C.	103	
	.. 1853,		109	Ida. 5 per Cent. 1864		
	.. 1858	101	110	INCORPORATED BANKS.		
	.. 1858	102	113	Per Cent.		
	.. 1860, 62	102½	112½	United States	7 1836	92½
Virginia	6 1844			Louisiana State	9 1870	35½
	5 1845, 51			R. of Louisiana	8 1870	36½
Maryland	4 1847			Bank of Orleans		
	.. 1848	110½		N. Orleans, C. & B.		105½
Ohio.....	6 1850		121	New York Life and Trust ..		119
	.. 1850		110½	Tenese Planters	9	109
Louisiana	3 1830, 49	98½		Mississippi	10	36½
	.. 1838, 43			Exchange		9
	.. 1844, 50	101½				

COURSE OF EXCHANGE.

FRIDAY, October 9, 1835.

	Prices negotiated on Change.	Prices printed.	Prices negotiated on Change.	Prices printed.
Amsterdam ..	13 7 1/2	13 7 1/2	Seville ..	36
Ditto at Sight ..	13 7 1/2	13 7 1/2	Gibraltar, p. A. d. 48 ..	48
Rotterdam ..	13 7 1/2	13 7 1/2	Leghorn ..	48
Antwerp ..	13 7 1/2	13 7 1/2	Genoa ..	48
Hamburg ..	13 7 1/2	13 7 1/2	Milan ..	48
Altona ..	13 7 1/2	13 7 1/2	Venice, p. A. d. 47 ..	47
Paris, 3 days sight ..	25 75	25 75	Naples ..	48
Ditto ..	25 75	25 75	Palermo ..	48
Marseilles ..	25 75	25 75	Lisbon ..	48
Frankfurt on Main, 12 1/2 ..	12 1/2	12 1/2	Opporto ..	48
Petersburgh, p. 10 ..	10	10	Rio Janeiro ..	48
Berlin, cur. doll. 7 3 ..	7 3	7 3	Buenos Ayres ..	48
Vienna cur. ..	10 10	10 10	Dublin ..	48
Trieste ditto ..	10 10	10 10	Cork ..	48
Madrid ..	36	36	Madras ..	48
Calcutta ..	36	36	Calcutta ..	48
Barcelona ..	36	36	..	48

GOLD AND SILVER.

Portugal Gold in Coin. Per Oz. £6 0 0	New Doubletons ..	£6 0 0
Foreign Gold in Bars. 3 1/2 9	New Dollars ..	£6 0 0
Silver in Bars (Standard) ..	£4 1 1/2	£4 1 1/2

PRICES OF SHARES.

MINES.

No. of Sh.	Amount paid, price	No. of Sh.	Amount paid, price
8,000 Albion Copper	£24 1/2	2,000 New Grenada	2
4,000 Allen	10 1/2	4,000 New S. Hoe	1 1/2
10,000 Anglo Mexican	100 1/2	North Consolidated	1
.. 5s. pm.	100 1/2	North Cornw. Silver	1 1/2
Ditto Subscription	25	6,000 Perran Consols	1 1/2
4,000 Blasco Bridge	2 1/2	2,000 Polheron Consols	1 1/2
3,000 Bolanos	150 125	1,000 Ditto Subscription	12
10,000 Brazil Imp. 1835, pm.	20 30 2	2,000 Polheron	1 1/2
8,000 British Tin	1 1/2	11,500 Real del Monte, Regist	62 1/2
10,000 Bolivar Copper	20 5 7	Ditto Unregistered	16 1/2
Ditto Scrip	3 3 1/2	Ditto Loan Notes	150 150
30,000 British Iron	50 50	2,000 Redmoor Consolidated	2 4 1/2
6,000 British Copper	30 6 1/2	10,000 Redruth United	2 1/2
10,000 Candonga	7 1/2	2,500 Rio de Anori	1 1/2
500 Carn Grey	3	10,000 Roche Rock	1 1/2
10,000 Cat. Branca	43 7 1/2	8,000 South Wheal Leisure	2 1/2
8,500 Columbian, 5s. 5 pm.	54 1/2	11,000 St. John Del Rey	210 5 1/2
1,500 Ditto New	7	8,000 St. Hilary	1 1/2
10,000 Copiapo	5 3/4	8,000 Tavistock	2 1/2
10,000 East Cornwall Silver	1 1/2	30,000 United Mex. 5s. 2 pm.	40 3 1/2
2,500 E. Wheel Strawberry	24	Ditto	40 3 1/2
2,005 English	12 1/2	Ditto Scrip	3
30,000 Gen. Min. Association	15 6 7	Ditto Subscription	3
10,000 Hibernian	10	Ditto New Scrip	5
6,000 Hayle Consols	1 1/2	5,000 Union Gold, 5s. 2 1/2 pm.	6 1/2
6,155 Mexican Company	5 1/2	2,000 Wendron	3 1/2
20,000 Min. Com. of Ireland	40	2,300 West Cork	25
10,000 Anglo Mexican Mint	40	5,600 Wheel Brothers	20 35
12,000 Morc & Coates Unit.	20 14		